SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION LIBRARIES

E-0
(E-9)

EGG COLLECTING AND BIRD LIFE

OF

AUSTRALIA.

Division of Birds

CATALOGUE AND DATA

OF THE

"JACKSONIAN OOLOGICAL COLLECTION,"

ILLUSTRATED WITH

NUMEROUS PHOTOGRAPHS

Depicting various incidents and items in connection with this interesting study, which has been the life work of the Author.

1907.

[COPYRIGHT.]

SYDNEY.
F. W. WHITE, PRINTER, 344 KENT STREET.
1907.

QL
675
J14
1907
Birds

Jackson, S. W.

Gregory M. Mathews
Foulis Court,
Fair Oak,
Hants.

EGG COLLECTING AND BIRD LIFE

OF

AUSTRALIA.

CATALOGUE AND DATA

OF THE

"JACKSONIAN OOLOGICAL COLLECTION,"

ILLUSTRATED WITH

NUMEROUS PHOTOGRAPHS

Depicting various incidents and items in connection with this interesting study, which has been the life work of the Author.

1907.

[COPYRIGHT.]

SYDNEY.
F. W. WHITE, PRINTER, 344 KENT STREET.
1907.

Smithsonian Institution
341046
U.S. National Museum

THE KOALA OR AUSTRALIAN NATIVE BEAR,
Phascolarctos cinereus, Fischer.

THIS very interesting and fast disappearing animal was frequently met with up to the end of 1893, and in those days was quite a familiar object in the Eucalyptus trees, coming into frequent contact with the practical oologist during his outings. On account of its constant association with lovers of bird lore in Australia, I have deemed it a fitting tribute to place its portrait as the introductory illustration to this volume.

It is represented at about one-sixth of its natural size, and was photographed from life by the Author.

(*See letterpress on page* 155.)

THE JACKSONIAN OOLOGICAL COLLECTION.

PREFACE.

THE Collection which is described in this Volume, is the result of twenty-four years' continuous work, as I commenced it in the year 1883; and a clutch taken in that year (Data No. 216) may be considered as the nucleus of the enterprise. In the early days of the collecting, I had little idea of the magnitude it would eventually assume, but, looking back over the years, a fund of pleasant memories and fascinating experiences more than counterbalances the endless patience and perseverance, the many disappointments, and the solid hard work which were necessary to bring it to its present condition.

Out of the 766 different kinds of birds known in Australia, the eggs of 526 species are in the collection, and totals 1914 specimens, almost all represented by full and neatly side-blown clutches, and all purely Australian with the exception of four species, viz., the King and Royal Penguins, Black-backed Gull, and Bennett's Cassowary.

There are clutches of 27 different kinds of Hawks, Falcons, Goshawks, and Eagles of the 28 known species in Australia; also, 28 of Parrots, 7 of Cockatoos, 3 of the Rifle Bird of Paradise, 3 of Lyre Birds, 21 of Pigeons, 10 of Cuckoos, 9 of Kingfishers, 48 of Honey Eaters, 6 of Bower Birds, 6 of Cuckoo Shrikes, 3 of Caterpillar Catchers or Campephagas, 18 of Fly-catchers and Fantails, 14 of Robins, 8 of Wood Swallows, 4 of Nightjars, 10 of Thrushes, 12 of Quail, and also those of hundreds of other species, all of which will be found in the index at the back of this volume.

I have been fortunate all through in making friends whose assistance and kindly interest have lightened my task considerably, and no description of the collection would be complete without due acknowledgment being accorded to several of them.

First and foremost, my late and much respected friend, Mr. WILLIAM MCENERNY, whose name appears constantly in these pages, was of frequent service to me, and he assisted at the taking of some of the rarest eggs that now grace the cabinet. He was with me during my four months' camp in the Richmond River scrubs of season 1899-1900, and we took together the first recorded clutch of the Rifle Bird of Paradise (*Ptiorhis paradisea*.) See Data No. 557.

My brother FRANK also greatly contributed to the building up of the collection, and his expert and utterly fearless climbing was of the greatest assistance. Some of the illustrations in the text give an idea of the dangerous work that was a matter of almost every day occurrence, and I cannot express my gratitude too warmly towards the brother whose cool head, steady hand and eye, were responsible for so many valuable clutches of the Hawks' and Eagles' eggs.

A word is also due to Messrs. L. VESPER, J. MCENERNY, A. AMOS and A. P. and A. BOON, who always gave a willing hand during my collecting trips in the Clarence River district, where the foundation of the collection was laid.

Although a large proportion of the species in the cabinet was taken by myself, it would, of course, have been impossible to obtain a representative collection of Australian birds' eggs single-handed, and I am indebted to correspondents in all parts of Australia for eggs peculiar to their respective localities.

JUL 2 0 1945

From North Queensland and the Gulf of Carpentaria Messrs. C. Woodlands and E. Drew forwarded a number of rare and interesting specimens, while Mr. L. Dumas in North-west, and Mr. S. Hall in South-west Australia, filled my Western Australian wants.

Eggs from the southern and central portions of the continent reached me from Messrs. A. J. Campbell, G. A. Keartland, D. Le Souëf, T. A. Brittlebank, and other well-known collectors, while Mr. M. W. Harrison was largely instrumental in supplying my Tasmanian desiderata.

As regards my own work, I may say that it has always been a labour of love, and I can linger over every detail of it, from the primitive methods of 1883 to the elaborate apparatus of the later years, with affectionate remembrance. The work was dangerous, yet in all my experience there is only one accident to recall, and that to myself. In the season of 1889 I fell from a tree at Toowoomba, Queensland, and sustained a compound fracture to my right shoulder.

From 1883 to 1889 our climbing was done without any adventitious aids, and we simply "scrambled" our trees, but in the latter year we took to ropes, poles and climbing spurs (see page 161), while from 1891 up to 1895 my brother did much climbing after the manner of the aborigines, by chopping steps into the tree with a tomahawk, and holding on by a strong green vine placed around the trunk (see pages 28, 126). We also used a strong rope fitted with a boatswain's chair, by means of which the climber was slowly and laboriously hauled to the desired spot. This method was not altogether satisfactory, apart from the hard work it entailed, as the rope frequently cut into the soft bark of the branch over which it was running, and jammed fast—an awkward predicament for the unfortunate left suspended in mid-air. (See page 43).

From 1895 onward use was made of a ladder specially designed by myself, which was over one hundred feet long, and proved of the utmost value to us; with it we could tackle and conquer the tallest giant of the forest.

As mentioned before, my brother, Mr. Frank T. A. Jackson, did most of the climbing on the ladder, which was made in two sections, to be coupled together by hooks when the full length was required. This ladder was made of Manilla rope, rove through holes made at the ends of strong cedar rungs, the latter resting on knots or Turks' heads worked into the rope. (See pages 7, 11, 15, 45, 47). The means adopted for placing the ladder in position were, in theory, very simple, though in practice complications often arose. A fine line, weighted with an ounce of lead, was fired from a catapult over a limb to the required height, and on recovery of the loaded end it was attached to a stronger line, and then to a rope one inch thick, which was hauled over the limb to the ground. The ladder was then attached and drawn up into position, the end of the hauling or guy line being made secure to a heavy log or tree butt.

The limb from which the ladder was suspended was always thoroughly tested by four times the weight of the man it had to carry, in order to ensure safety to the climber.

The ladder rolled up and fitted into a waterproof bag which, with the camera and other paraphernalia, was strapped upon a stage behind a vehicle, which we had specially built for nesting purposes. (See page 85.)

Each set of eggs in the collection has been carefully numbered and ticketed, and corresponds with the numbers given in the following pages. All doubtful eggs have been discarded, and the fullest possible data has been set forth in connection with each clutch of eggs. Those taken by myself, or under my personal supervision, are in many cases very fully treated, and especially those that were worthy of minute description, for I kept careful note books with abundant details. In the first part of the volume the descriptions are in some instances rather

brief, and to go into particulars with each species would, of course, necessitate a two volume work. The specimens received from other collectors in exchange are, in many cases, accompanied by only meagre data, a fact which, however, does not mar their authenticity.

During my rambles through the scrubs and forests of the Bellenger, Clarence, and Richmond River districts of New South Wales, I always carried a camera with me when practicable, and succeeded in supplementing my oological trophies with many unique and interesting photographs, a large selection of which appears in the present volume. The camera proved invaluable for recording the natural situations of those nests, which were too bulky to collect *in toto*, and in this way a mass of interesting information was made available which would otherwise have been lost.

The collection has now passed from my hands, having been purchased by another bird lover, viz., HENRY L. WHITE, Esq., of Belltrees, near Scone, New South Wales, but, though I can no longer pore over the treasures it contains, pleasant recollections of the building will always be with me, and the thought of it will bring back happy memories of many golden days and sparkling nights in the open.

S.W.J.

Chatswood,

Sydney,

12th November, 1907.

Drawer A. (Top Drawer on left side of Cabinet.)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
1	370	5	YELLOW-TIPPED PARDALOTE, *Pardalotus affinis*, Gould. Clutch of 5 eggs, taken in J. Morris's paddock by Frank and Sid. W. Jackson, from the hollow limb of a Red Eucalypt *(Eucalyptus rostrata)*, near South Grafton, Clarence River, New South Wales, on 7th October, 1894. Nest was placed 45 feet above the ground, and took a great deal of chopping before the eggs were discovered. An average specimen of the set measures in inches = 0·75 × 0·55.
2	376	4	FORTY-SPOTTED PARDALOTE, *Pardalotus quadragintus*, Gould. Clutch of 4 eggs, taken in the cliffs at Berriedale, Glenorchy, Tasmania, by M. W. Harrison, on 24th October, 1896. An average specimen of the set measures in inches = 0·77 × 0·58.
3	374	4	BLACK-HEADED PARDALOTE, *Pardalotus melanocephalus*, Gould. Clutch of 4 eggs, taken by Sid. W. Jackson, at Clarenza, South Grafton, Clarence River, N. S. Wales, on 17th August, 1897. Nest was built in the earth attached to the roots of a fallen Spotted Eucalypt *(Eucalyptus maculata.)* Photo. of this nest is also in A. J. Campbell's book, page 448. Specimen A. of the set measures in inches = 0·74 × 0·52.
4	371	4	SPOTTED PARDALOTE, *Pardalotus punctatus*, Shaw. Clutch of 4 eggs, taken by Frank and Sid. W. Jackson, in bank of small creek, at the Wash Pen Gully, South Grafton, Clarence River, N.S.W., on 20th November, 1892. Specimen A. measures in inches 0·67 × 0·5[illegible].
5	368	4	RED-TIPPED PARDALOTE, *Pardalotus ornatus*, Temminck. Set of 4 eggs, taken by Sid. W. Jackson, at the South-west Arm Port Hacking, near Sydney, on 6th September, 1903. Nest was placed at the extremity of a tunnel, made in a heap of decayed oyster shells

NEST OF THE BLACK-HEADED PARDALOTE,
Loc. Clarenza, Clarence River, N.S.W.
(Set of eggs, data No. 3, was taken from opening just below the white cross.)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			(Ostreidæ), in a cave. This cavern was, no doubt, at one time used by the aborigines as a feeding ground, and the many tons of decayed shells in it go to prove this, as after each feast or meal the shells were left to accumulate. Specimen A. measures in inches = 0·66 × 0·47.
6	372	4	YELLOW-RUMPED PARDALOTE, *Pardalotus xanthopygius*, McCoy. Clutch of 4 eggs, taken near Murtoa, Victoria, on 4th October, 1896. It is thought that William White, of the Reed Beds, South Australia, was the first person to recognise this pretty Pardalote as a new species. Specimen A. measures in inches = 0·67 × 0·52.
7	373	4	RED-BROWED PARDALOTE. *Pardalotus rubricatus*, Gould. Taken at Charters Towers, N. Queensland, by E. Groves, on 6th July, 1894. Nest was placed in the bank of a creek. Specimen A., of the clutch of 4 eggs, measures in inches = 0·71 × 0·55.
8	375	4	CHESTNUT-RUMPED PARDALOTE, *Pardalotus uropygialis*, Gould. Set of 4 eggs, taken from the bank of a creek in the Nicholson River district, Gulf of Carpentaria, North West Queensland, by C. Woodlands, on 24th September, 1897. Specimen A. measures in inches = 0·72 × 0·55.
9	186	4	TASMANIAN TIT, *Acanthiza diemenensis*, Gould. Taken by M. W. Harrison, at Cascades, Tasmania, on 9th October, 1899. Set of 4 eggs.
10	194	3	SCRUB TIT, *Acanthornis magna*, Gould. Taken by Arthur E. Brent, at Glenorchy, Tasmania, on 26th December, 1895. Set of 3 eggs.
11	185	3	BROWN TIT, *Acanthiza pusilla*, White. Taken by Sid. W. Jackson, in Alipou Scrub, South Grafton, N.S.W., on 10th September, 1897. Set of 3 eggs. Specimen A. measures = 0·63 × 0·49.
12	190	3	CHESTNUT-RUMPED TIT, *Acanthiza uropygialis*, Gould. Taken by C. G. Gibson, at Burtville, West Australia, on 31st July, 1905. Set of 3 eggs. Specimen A. measures = 0·62 × 0·47.
13	187	1	BROAD-TAILED TIT, *Acanthiza apicalis*, Gould. Taken by J. W. Mellor, near Adelaide, South Australia, during October, 1891.
14	189	3	STRIATED TIT, *Acanthiza lineata*, Gould. Taken by Sid. W. Jackson, in Alipou Scrub, South Grafton, N.S.W., on 4th September, 1897. Set of 3 eggs. Nest built in Prickly Fig Tree *(Ficus stephanocarpa.)*
15	193	3	BUFF-RUMPED TIT, *Acanthiza reguloides*, V. and H. Taken by J. Hill, at Kewell, Victoria, on 2nd September, 1894. Set of 3 eggs.
16	193	3	Taken by Sid. W. Jackson, at Roseville, Sydney, on 14th November, 1906. Set of 3 eggs.
17	193	4	Taken by Sid. W. Jackson, at Roseville, Sydney, on 12th November, 1906. Set of 4 eggs. The nest was beautifully hidden in the hollow of a Forest Oak tree *(Casuarina torulosa)*, and placed four

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			feet from the ground. The opening of the nest was very small, and I was obliged to use a tea-spoon in order to remove the eggs from it. These birds build their nests in quite a variety of strange places, and those most frequented are in loose bark hanging on the trunks of the Black-butt and other trees, where they are completely hidden from observation.
18	192	4	YELLOW-RUMPED TIT, *Acanthiza chrysorrhoa*, Q. and G.. Taken by Sid. W. Jackson, at O.B.N. Creek, Clarence River District, N.S.W., on 23rd September, 1893. Set of 4 eggs. Nest built in an Apple tree (*Angophora subvelutina.)*
19	188	3	RED-RUMPED TIT, *Acanthiza pyrrhopygia*, Gould. Taken by H. Lidgett at Myrniong, Victoria, on 17th October, 1903. Set of 3 eggs. Specimen A. measures = 0·59 × 0·45.
20	183	3	LITTLE TIT. *Acanthiza nana*, V. and H. Taken by Sid. W. Jackson, at Little Murray River, near Don Dorrigo Scrubs, Upper Bellinger River District, N.S.W., on 14th October, 1898. Set of 3 eggs.
21	399	8	CHESTNUT-BREASTED FINCH. *Munia castaneothorax*, Gould. Taken by Sid. W. Jackson, at Grafton, Clarence River, N.S.W., 10th March, 1900. Nest built in long blady grass *(Imperata arundinacea)*, on the south bank of the Clarence River. Set of 8 eggs. These birds are very plentiful in the grass beds of the Clarence River district, and we have frequently seen large flocks of them there. The nests were always built in long grass, and sometimes reeds, and were large bottle-shaped structures, composed of dried grasses. They are familiarly known as "Barley Birds" in the district.
22	399	5	Taken by Sid. W. Jackson, at South Grafton, N.S.W., 17th November, 1898. Set of 5 eggs.
23	410	5	GOULDIAN GRASS FINCH (Black-headed phase), *Poephila mirabilis*, H. and J. Taken by C. Woodlands, near Burketown, North Queensland, 13th August, 1895. Set of 5 eggs. Eggs were perfectly fresh when taken. Specimen A. measures = 0·65 × 0·46.
24	410	5	GOULDIAN GRASS FINCH (Crimson-headed phase), *Poephila mirabilis*, H. and J. Taken by C. Woodlands, near Burketown, North Queensland, on 24th September, 1897. Set of 5 eggs. Specimen A. measures = 0·67 × 0·48.
25	405	4	LONG-TAILED GRASS FINCH, *Poephila acuticauda*, Gould. Taken west of Burketown, North Queensland, on 17th October, 1892. Set of 4 eggs.
26	403	8	RED-BROWED FINCH, *Egintha temporalis*, Latham. Taken at South Grafton, Clarence River, N.S.W., by Sid. W. Jackson, on 1st October, 1898. Set of 8 eggs.
27	403	6	Taken by Sid. W. Jackson, at Ourimbah, near Gosford, N.S.W., 11th December, 1905. Set of 6 eggs.
	455	1	NARROW-BILLED BRONZE CUCKOO, *Chalcococcyx basalis*, Horsfield. Taken by Sid. W. Jackson, at Ourimbah, near Gosford, N.S.W., 11th December, 1905. Found in with the 6 Finch eggs. This Cuckoo's egg measures = 0·68 × 0·47.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
28	398	6	RINGED FINCH, *Stictoptera annulosa*, Gould. Taken near Port Darwin, North Australia, by E. Drew, during October 1890. Set of 6 eggs.
29	393	5	FIRE-TAILED FINCH, *Zonæginthus bellus*, Latham. Taken by M. W. Harrison, near Hobart, Tasmania, 30th December, 1893. Set of 5 eggs.
30	406	6	BLACK-THROATED GRASS FINCH, *Poephila cincta*, Gould. Taken by H. Barnard, near Rockhampton, Queensland, 10th November, 1899. Set of 6 eggs.
31	396	5	CHESTNUT-EARED FINCH, *Tæniopygia castanotis*, Gould. Taken by Sid. W. Jackson at Flat Rock, Middle Harbour, Sydney, on 22nd September, 1902. Set of 5 eggs. Nest built in a Banksia tree (*Banksia integrifolia.*) Specimen A. measures = 0·62 × 0·42.
32	409	3	BLACK-RUMPED GRASS FINCH, *Poephila atropygialis*, Diggles. Taken by C. Woodlands, near Burketown, North Queensland, 24th September, 1897. Set of 3 eggs. These eggs are the smallest of all those of the Finch tribe, in fact they are the smallest laid by any of our Australian birds. Specimen A. of this rare set measures in inches = 0·56 × 0·40.
33	397	5	BANDED FINCH, *Stictopera bichenovii*, V. and H. Taken by E. Groves, near Rockhhmpton, Queensland, 11th September, 1894. Set of 5 eggs.
34	392	5	SPOTTED-SIDED FINCH, *Staganopleura guttata*, Shaw. Taken by Sid. W. Jackson at Clarenza, South Grafton, Clarence River, N.S.W., on 30th January, 1898. Nest was built in the sticks under the huge nest of the Whistling Eagle. Set of 5 eggs. These beautiful birds, which are better known as "Diamond Sparrows," I have found plentiful in the Clarence River District and other parts of New South Wales and Queensland, and during March of this year (1907) I saw many on Segenhoe Flats and Belltrees Station, near Scone, N.S.W., where they were on the ground feeding amongst the Roly-poly weed (*Salsola Kali.*)
35	411	3	CRIMSON FINCH, *Neochmia phaeton*, H. and J. Taken by E. Drew near Normanton, Queensland, on 1st October, 1896. Set of 3 eggs and 1 Cuckoo's egg.
	153	1	CHESTNUT-BREASTED CUCKOO, *Cacomantis castaneiventris*, Gould. Taken by E. Drew, near Normanton, Queensland, on 1st October, 1896. Taken with Finch eggs. It measures = 0·80 × 0·60.
36	402	3	PLUM-HEAD FINCH, *Aidemosyne modesta*, Gould. Taken by C. A. Barnard, near Rockhampton, Queensland, on 20th October, 1897. Set of 3 eggs.
37	138	4	SILVERY-BLUE WREN, *Malurus cyanochlamys*, Sharpe. Taken by T. Moore, at Toowoomba, Queensland, on 29th July, 1898. Set of 4 eggs.
38	142	2	TORQUOISE WREN, *Malurus callainus*, Gould. Taken at Wallaroo, near Adelaide, South Australia, on 19th September, 1891. Set of 2 eggs.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
39	147	4	LAMBERT'S WREN, *Malurus lamberti*, V. and H. Taken at Roseville, Sydney, by Sid. W. Jackson, on 10th December, 1906. Set of 4 eggs.
	452	1	SQUARE-TAILED CUCKOO, *Cacomantis variolosus*, Horsfield. Taken at Roseville, Sydney, by Sid. W. Jackson, on 10th December, 1906. Taken with the 4 Wren's eggs.
39A	147	4	LAMBERT'S WREN, *Malurus lamberti*, V. and H. Taken by Sid. W. Jackson, at Roseville, near Sydney, on 27th October, 1905. Nest placed among ferns near the ground. These handsome little birds I found rather plentiful in the bush between North Sydney and Hornsby.
40	152	3	ORANGE-BACKED WREN, *Malurus melanocephalus*, V. and H. Taken at Bald Hills, near Sandgate, Queensland, by Sid. W. Jackson, on 20th December, 1886. Set of 3 eggs.
41	152	3	Taken near Rockhampton, Queensland, by C. A. Barnard, on 4th September, 1898. Set of 3 eggs.
42	152	3	Taken by Sid. W. Jackson, at Nymboida, near Grafton, N.S.W., on 6th October, 1898. Set of 3 eggs.
43	141	3	BLACK-BACKED WREN, *Malurus melanotus*, Gould. Taken by G. Thomas, near Dubbo, N.S.W., on September 19th, 1902. Set of 3 eggs.
44	139	4	LONG-TAILED BLUE WREN, *Malurus gouldi*, Sharpe. Taken by M. W. Harrison, near Hobart, Tasmania, on 9th November, 1893. Set of 4 eggs.
45	151	2	RED-BACKED WREN, *Malurus dorsalis*, Lewin. Taken by E. Drew, near Burketown, North Queensland, on 1st January, 1897. Set of 2 eggs. One egg is very finely spotted, while the other is a heavily blotched specimen.
46	144	3	WHITE-WINGED WREN, *Malurus leucopterus*, Q. and G. Taken by T. Brittlebank, at Benjeroop, Victoria, 8th November, 1896. Set of 3 eggs
47	146	3	RED-WINGED WREN. *Malurus elegans*, Gould. Taken at Broome, West Australia, by G. Dunstan, on 4th September, 1902. Set of 3 eggs.
48	143	3	BANDED WREN *Malurus splendens*, Q. and G. Taken near Freemantle, West Australia, by G. Dunstan, on 22nd August, 1896. Set of 3 eggs.
49	137	4	BLUE WREN, *Malurus cyaneus*, Ellis. Taken by Sid. W. Jackson, at Ourimbah, near Gosford, N.S.W., on 21st November, 1905. Set of 4 eggs.
	451	1	FAN-TAILED CUCKOO. *Cacomantis flabelliformis*, Latham. Taken by Sid. W. Jackson, at Ourimbah, near Gosford, N.S.W., on 21st November, 1905. Taken with the 4 Wren's eggs.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
50	137	3	BLUE WREN, *Malurus cyaneus*, Ellis. Taken by Sid. W. Jackson, at Booyong, Richmond River, N.S.W., on 27th October, 1899. Set of 3 eggs. Specimen A. measures = 0·69 × 0·50.
51	137	4	Taken by Sid. W. Jackson at South Grafton, Clarence River, N.S.W., on 8th August, 1893. Set of 4 eggs. Nest built in *Sida retusa*.
52	145	3	WHITE-BACKED WREN, *Malurus leuconotus*, Gould. Taken at York, North Western Australia, on 9th November, 1904. Set of 3 eggs.
53	170	3	EMU WREN, *Stipiturus malachurus*, Shaw. Taken by Sid. W. Jackson, at Flat Rock, Middle Harbour, Sydney, on 16th September, 1903. Nest was most difficult to find, and was placed only twenty yards from a Bristle Bird's nest. Set of 3 eggs. A. F. Bassett. Hull has taken two sets of the eggs near Manly, Sydney. Specimen A. measures = 0·64 × 0·47.

Drawer B.

54	121	3	WHITE-BROWED ROBIN, *Poecilodryas superciliosa*, Gould. Taken on the Norman River, Gulf of Carpentaria, by C. Woodlands, on 1st November, 1898. Set of 3 eggs. Specimen A. measures = 0·78 × 0·60.
55	117	2	HOODED ROBIN, *Melanodryas bicolor*, V. and H. Taken by Sid. W. Jackson, at South Grafton, Clarence River, N.S.W., on 21st October, 1894. Nest built in Swamp Tea Tree (*Melaleuca*). Set of 2 eggs.
56	117	1	Taken near Wallangarra, N.S.W., by G. Covley, on 14th September, 1893. Set of 1 egg.
57	119	3	DUSKY ROBIN, *Amaurodryas vittata*, Q. and G. Taken by G. Chrisp, at Ringarooma, North Tasmania, on 18th October, 1900. Splendid set of 3 eggs. Specimen A. measures = 0·84 × 0·64.
58	120	2	WHITE-BREASTED ROBIN, *Amaurodryas gularis*, Q. and G. Taken on the Blackwood River, West Australia, by S. Hall, on 19th September, 1897. Set of 2 eggs. Specimen A. measures = 0·83 × 0·67.
59	254	2	YELLOW-RUMPED SHRIKE ROBIN, *Eopsaltria chrysorrhous*, Gould. Taken at Booyong, near Lismore, Richmond River scrubs, N.S.W., on 4th November, 1899, by Sid. W. Jackson. Nest built in Lawyer vines (*Calamus australis.*) Set of 2 eggs.
59A	254	2	Taken at Binna Burra, near Lismore, N.S.W., by Sid. W. Jackson, on 3rd December, 1899. Set of 2 eggs.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
60	253	2	YELLOW-BREASTED SHRIKE ROBIN, *Eopsaltria australis*, Latham. Taken near Wollongong, N.S.W., by Sid. W. Jackson, on 16th June, 1905. Nest built in a large Tree fern (*Alsophila australis.*) Set of 2 eggs.
61	253	3	Taken by Sid. W. Jackson, on September 16th, 1894, in Alipou scrub, South Grafton, N.S.W. Nest built in a Giant Leaf Nettle tree (*Urtica gigas.*) Set of 3 eggs.
62	124	2	LESSER LARGE-HEADED ROBIN, *Pœcilodryas nana*, Ramsay. Taken by E. Groves, at Mareeba, Cairns, Queensland, on 18th October, 1893. Beautiful set of 2 eggs. Specimen A. measures = 0·78 × 0·57.
63	123	2	LARGE-HEADED ROBIN, *Pœcilodryas capito*, Gould. Taken by A. Boon and Sid. W. Jackson, at Vinegar Hill scrub, near Tyringham, 55 miles South West of Grafton, N.S.W., on 9th October, 1898. Nest built in young Hoop Pine tree (*Araucaria Cunninghamii*), and is very much smaller than that of *Eopsaltria australis*, and more neatly constructed. Set of 2 eggs. Specimen A. measures in inches = 0·79 × 0·57.
64	255	2	GREY-BREASTED SHRIKE ROBIN, *Eopsaltria georgiana*, Q. and G. Taken by S. Hall on the banks of the Blackwood River, West Australia, 27th September, 1897. Set of 2 eggs.
65	112	3	FLAME-BREASTED ROBIN, *Petrœca phœnicea*, Gould. Taken by M. W. Harrison, near Hobart, Tasmania, on 15th October, 1898. Set of 3 eggs.
66	113	3	PINK-BREASTED ROBIN, *Petrœca rhodinogastra*, Draper. Taken by M. W. Harrison, near Hobart, Tasmania, on 31st December, 1898. Set of 3 eggs.
67	110	3	SCARLET-BREASTED ROBIN, *Petrœca leggii*, Sharpe. Taken by Sid. W. Jackson, from the hollow of a Forest Oak tree (*Casuarina torulosa*), on Oak Flat, Bostobric, near Don Dorrigo scrubs, New South Wales, on October 19th, 1898. Set of 3 eggs.
68	114	3	ROSE-BREASTED ROBIN *Petrœca rosea*, Gould. Taken by Sid. W. Jackson, at Cloud's Creek, South-west of Grafton, N.S.W., on 7th October, 1898. Set of 3 eggs.
69	115	2	RED-CAPPED ROBIN, *Petrœca goodenovii*, V. and H. Taken by Sid. W. Jackson, at Nymboida, near Grafton, N.S.W., on 6th October 1898. Nest built in a Swamp Oak tree (*Casuarina glauca.*) Set of 2 eggs.

Getting the Tree-climbing Ladder out for an Overhaul.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
70	384	4	WHITE-BROWED WOOD SWALLOW, *Artamus superciliosus*, Gould. Taken by Sid. W. Jackson, at Clarenza, near South Grafton, N.S.W., on 28th October, 1894. Beautiful set of 4 eggs.
71	384	3	Taken by C. A. Barnard, near Rockhampton, Queensland, on 17th November, 1903. Set of 3 eggs.
72	383	3	WHITE-RUMPED WOOD SWALLOW, *Artamus leucogaster*, Valenc. Taken by J. McEnerny and Sid. W. Jackson, near South Grafton, Clarence River, N.S.W., on 8th July, 1897. Beautiful set of 3 eggs.
73	385	3	MASKED WOOD SWALLOW, *Artamus personatus*, Gould. Taken by Sid. W. Jackson, at Botany, Sydney, on 26th October, 1903. Beautiful set of 3 eggs. Specimen A. measures = 0·90 × 0·66.
74	385	2	Taken by Sid. W. Jackson, at Botany, Sydney, on 26th October, 1903. Set of 2 eggs.
75	387	4	WHITE-BELLIED WOOD SWALLOW, *Artamus hypoleucus*, Sharpe. This handsome clutch was taken near Burketown, in the Gulf of Carpentaria district, by C. Woodlands, on 28th September, 1897. Set of 4 eggs.
76	387	3	Taken by H. Barnard, near Rockhampton, Queensland, on 13th September, 1897. This is a much more heavily marked set than No. 75. Set of 3 eggs.
77	387	3	Taken by H. Barnard, near Rockhampton, Queensland, on 11th September, 1897. Set of 3 eggs. Specimen A. measures = 0·85 × 0·65.
78	386	3	GREY-BREASTED WOOD SWALLOW, *Artamus cinereus*, Vieillot, Taken north of Perth, West Australia, by F. Buttler, on 1st November, 1899. Set of 3 eggs. Specimen A. measures = 0·84 × 0·67.
79	388	4	BLACK-FACED WOOD SWALLOW, *Artamus melanops*, Gould. Taken by J. Watson, at Buckiinguy, Western N.S.W., on 23rd September, 1897. These eggs vary, though they are from the same nest. Set of 4 eggs.
80	389	3	WOOD SWALLOW, *Artamus sordidus*, Latham. Taken at Ti Tree Creek, South Grafton, N.S.W., on 2nd October, 1895, by Sid. W. Jackson. Set of 3 eggs and 1 Pallid Cuckoo's egg.
	450	1	PALLID CUCKOO, *Cuculus pallidus*, Latham. Taken at Ti Tree Creek, South Grafton, N.S.W., on 2nd October, 1895, by Sid. W. Jackson. Taken with the 3 Wood Swallow's eggs.
81	390	3	LITTLE WOOD SWALLOW, *Artamus minor*, Vieillot. Taken by C. Woodland's collector, near Normanton, Queensland, 25th September, 1898. Set of 3 eggs. These are rare eggs and represented in very few collections. A specimen of the clutch measures in inches = 0·70 × 0·58.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
82	215	3	CHESTNUT-RUMPED GROUND WREN, *Hylacola pyrrhopygia*, V. and H.

Taken by A. F. Bassett. Hull, near Freshwater, Manly, Sydney, on 2nd August, 1902. Beautiful set of 3 eggs. This lively little bird I found plentiful in certain localities about Sydney, and succeeded in finding three of the nests. I saw them often in the bush between Freshwater and Dee Why, near Manly. They are shy, and keep themselves well hidden in the short dense vegetation, and suddenly they will often pop out, and then run along the ground very fast. The eggs are very dark, and somewhat chocolate-coloured, and resemble, more than any others, some specimens of those of the Yellow-throated Scrub Wren (*Sericornis.)* The nest is a dome-shaped structure, very loosely put together, and placed near the ground in some thickly-foliaged bush, or in long grass and weeds. Specimen A. measures in inches = 0·84 × 0·63.

83	259	2	WHITE-THROATED THICKHEAD, *Pachycephala gutturalis*, Latham.

Taken by Sid. W. Jackson, in Alipou Scrub, South Grafton, N.S.W., on 21st August, 1892. Beautiful set of 2 eggs.

84	259	2	

Taken in Alipou Scrub, South Grafton, N.S.W., by Frank and Sid. W. Jackson, on 1st November, 1893. Beautiful set of 2 eggs.

85	259	2	

Taken by Sid. W. Jackson, at Booyong, near Lismore, N.S.W., on 18th November, 1899. Ground color of this set is white. Set of 2 eggs.

86	259	3	

Taken at Vinegar Hill Scrub, near Tyringham, 55 miles south-west of Grafton, N.S.W., by A. Boon and Sid. W. Jackson, on 23rd October, 1898. This is the most handsome set of these eggs I have ever seen, and being so heavily blotched resemble well marked specimens of those of the Harmonious Thrush. This lovely set of 3 completes the above series of the four differently marked sets displayed in the collection. I noticed that this bird utters quite a different note in the Richmond River scrubs, as compared with those found about Sydney. Specimen A. measures = 0·92 × 0·68.

87	261	3	GREY-TAILED THICKHEAD, *Pachycephala glaucura*, Gould.

Taken by M. W. Harrison, near Hobart, Tasmania, on 28th November, 1897. Beautiful set of 3 eggs.

88	258	3	BLACK-TAILED THICKHEAD, *Pachycephala melanura*, Gould.

Taken at Bundaberg, Queensland, by T. Williams, on 7th December, 1899. Set of 3 eggs. I saw this bird in the Richmond River scrubs in 1899. Specimen A. measures = 0·94 × 0·66.

89	265	2	OLIVE THICKHEAD, *Pachycephala olivacea*, V. and H.

Taken at Sandford, Tasmania, by M. W. Harrison, on 24th November, 1897. Set of 2 eggs. Specimen A. measures = 1·05 × 0·77.

90	260	2	WESTERN THICKHEAD, *Pachycephala occidentalis*, Ramsay.

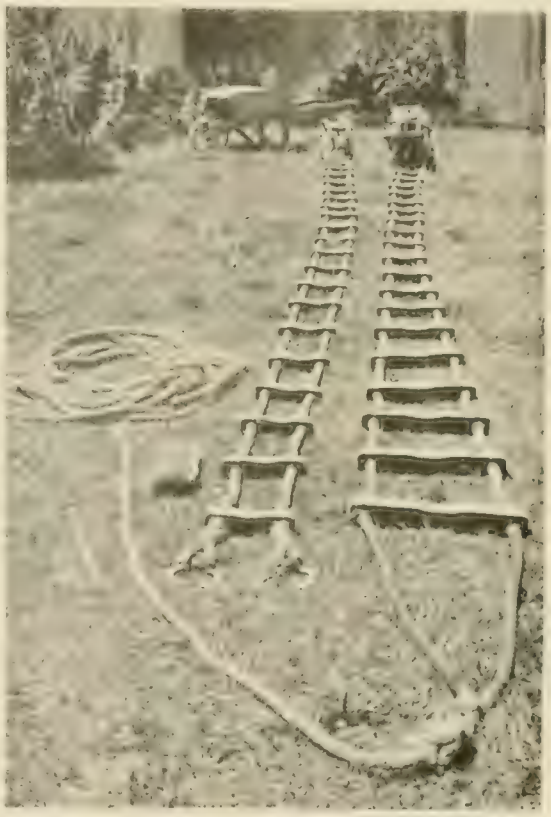
Taken at the Blackwood River, South West Australia, by S. Hall, 20th September, 1895. Set of 2 eggs.

91	264	3	RED-THROATED THICKHEAD, *Pachycephala gilberti*, Gould.

Taken at the Mann River, east of Glen Innes, N.S.W., on July 21st, 1896, by G. Covley. Beautiful set of 3 eggs.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
92	263	3	RUFOUS-BREASTED THICKHEAD, *Pachycephala rufiventris*, Latham. Taken at South Grafton, Clarence River, N.S.W., by Sid. W. Jackson, on 17th September, 1893. Set of 3 eggs. Nest built at altitude of 35 feet, in a Swamp Ti Tree (*Melaleuca.*) This species is also well known as the Thunder Bird, on account of it repeating its note each time a clap of thunder is heard, or a gun is fired in the bush. In fact any sudden noise is immediately followed by a rapid succession of notes, lasting about ten or twelve seconds, and which ultimately terminate with sounds resembling "chew-ee, chew-ee, chew-ee," but which are uttered very slowly. In the Clarence River district this bird resorts principally to the small-leaved Ti or Tea Tree (*Melaleuca*) during the breeding season, and in this tree we have found many of their nests. In Queensland I found them building frequently in the Oak trees (*Casuarina*), about creeks and swamps. Last season (1906) the birds were very plentiful everywhere, and they seemed to be in every part of the bush I visited, and by hitting a dead tree or log with a tomahawk, very soon brought a clamorous response if they were in the neighbourhood.
93	263	3	Taken at Billy's Creek, 50 miles south-west of Grafton, N.S.W., by Sid. W Jackson, on 14th February, 1900. Set of 3 eggs.
94	263	2	Taken by W. McKee, at Taree, Manning River, N.S.W., during September, 1890. This pair of eggs is of the rare *salmon color* variety, which is to be found in very few collections. The only other eggs of this type which I have seen are in the collection of A. F. Basset. Hull, of Sydney, and were found at Manly.
95	262	3	NORTHERN THICKHEAD, *Pachycephala falcata*, Gould. Taken at Cooktown, Queensland, by E. Groves, on 12th October, 1895. Set of 3 eggs. Specimen A. measures = 0·77 × 0·61.
96	273	2	WHITE-THROATED TREE CREEPER, *Climacteris leucophaea*, Latham. Taken from the hollow limb of a tree in Alipou scrub, South Grafton, Clarence River, N.S.W., on 27th October, 1895, by G. Rowles and Sid. W. Jackson. Set of 2 eggs. We never found many eggs of this species in the Clarence River district, and the birds, I find, are more plentiful about Sydney. I saw an egg of this species last season (1906), which was found stuck to the bark on the side of a Black-butt Eucalyptus, at Roseville, near Sydney. The bird had evidently laid the egg as she was climbing on the trunk of the tree feeding, and it was caught in a small portion of bark, which projected out just a little from the trunk. It was quite fresh when found. The following beautiful clutch (97) of these eggs I found near Sydney.
97	273	3	Taken from the hollow of a Black-butt Eucalypt (*Eucalyptus pilularis*), at Middle Harbour, Sydney, by Sid. W. Jackson, on 9th November, 1903. Beautiful set of 3 eggs. Specimen A. measures in inches = 0·93 × 0·65.
98	271	2	BROWN TREE CREEPER, *Climacteris scandens*, Temminck. Taken from the spout of a tall Iron-bark tree (*Eucalyptus siderophloia*), at Glen Ugie Peak, Clarence River district, N.S.W., on 21st November, 1897, by Sid. W. Jackson. Set of 2 eggs. Very difficult climb. I saw many of these birds on Belltrees Station, near Scone, N.S.W., during the end of March of this year (1907).
99	270	1	BLACK TREE CREEPER, *Climacteris melanura*, Gould. Taken from the hollow limb of a tree near Cloncurry, Queensland, by a black boy, during September, 1891. The birds were identified at the same hollow the next morning. The egg measures = 0·87 × 0·70

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
100	451	1	FAN-TAILED CUCKOO, *Cacomantis flabelliformis*, Latham. Taken by Sid. W. Jackson from a nest of the Large-billed Scrub Wren (*Sericornis magnirostris*), at Billy's Creek, south-west of Grafton, N.S.W., on 17th October, 1898. Only the Cuckoo's egg was in the nest.
101	455	1	NARROW-BILLED BRONZE CUCKOO, *Chalcococcyx basalis*, Horsfield. Taken by J. McEnerny from a nest of the Blue Wren (*Malurus cyaneus*), at the Orara River scrub, near Grafton, N.S.W., on 23rd October, 1892.
102	457	1	BRONZE CUCKOO, *Chalcococcyx plagosus*, Latham. Taken by Sid. W. Jackson, from a nest of the Brown Fly Eater (*Gerygone fusca*), in Alipou scrub, South Grafton, N.S.W., on 16th October, 1892.
103	157	1	Taken by Frank and Sid. W. Jackson, from a nest of the White-throated Fly Eater, or Native Canary *(Gerygone albigularis)*, at Sandgate, near Brisbane, Queensland, during the month of September, 1887. The nest was built in a Mangrove tree *(Avicennia officinalis)*, growing in the waters of Moreton Bay, and was constructed principally of wadding. This material we tied to a limb near the started nest, and the birds very wisely utilised it. I have the nest.
104	195	1	RED-THROAT, *Pyrrholæmus brunnea*, Gould. This handsome egg was taken at Laverton, West Australia, by C. G. Gibson, on 10th July, 1905. This is the *first* of this species that I have ever had the pleasure of seeing, and is the *darkest* egg laid by any of the Australian birds. It measures = 0·77 × 0·56.
105	153	4	REED WARBLER, *Acrocephalus australis*, Gould. Taken by Frank and Sid. W. Jackson, on 25th November, 1892, in the reeds growing on the edge of Elizabeth Island, at Grafton, Clarence River, N.S.W. Set of 4 eggs. This bird I have often heard whistling very sweetly on moonlight nights. They are very plentiful along the banks of the Clarence River, where they find a good supply of reeds wherein to feed and build their nests. Some localities are frequented by them where the reeds are absent, and the nests are then built in other growths. For instance, on Belltrees Station, near Scone, N.S.W., no reeds are found on the banks of the Upper Hunter River there, and I understand that these birds build in the Blue Weed or Wild Verbena (*Verbena bonariensis*), which grows abundantly along the rich alluvial banks of that river.
106	154	4	LONG-BILLED REED WARBLER, *Acrocephalus longirostris*, Gould. Taken near Swan River, West Australia, by G. Dunstan, on 11th December, 1896. Set of 4 eggs. Specimen A. measures in inches = 0·79 × 0·57.



This bird is a part of the nest and some [illegible] the Tree Climbing Tailor, which [illegible] trees when nesting.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
107	219	2	WEDGE BILL, *Sphenostoma cristatum*, Gould. Taken by S. Robinson, at Opher Creek, near Cunnamulla, South-west Queensland, on 12th September, 1898. Set of 2 eggs. They are blue, marked sparingly with dark spots and blotches, and resemble those of the Coach-whip bird, only they are very much smaller. Specimen A. measures in inches = 0·95 × 0·68.
108	25	2	SHRIKE TIT, *Falcunculus frontatus*, Latham. Taken at Glen Ugie Peak, near Grafton, N.S.W., by W. McEnerny and Sid. W. Jackson, on 19th November, 1893. Nest very difficult to get at. Set of 2 eggs. Specimen A. measures in inches = 0·90 × 0·65. These birds I found plentiful in the bush between North Sydney and Hornsby.

Drawer C.

109	550	2	WONGA WONGA PIGEON, *Leucosarcia picata*, Latham. Taken by Frank and Sid. W. Jackson, in scrub at Coutt's Crossing, near Grafton, N.S.W., on 23rd December, 1894. I have always found these nests very difficult to find. Set of 2 eggs. Specimen A. measures in inches = 1·52 × 1·15.
110	545	2	BRONZE-WINGED PIGEON, *Phaps chalcoptera*, Latham. Taken by Sid. W. Jackson, from a Red Eucalypt tree, near South Grafton, N.S.W., on 9th November, 1897. Set of 2 eggs. Specimen A. measures = 1·37 × 1·06.
111	546	2	BRUSH BRONZE-WINGED PIGEON, *Phaps elegans*, Temminck. Taken by Sid. W. Jackson, at Port Hacking, Sydney, on 7th September, 1903. Nest built in Dwarf Apple tree *(Angophora cordifolia.)* Set of 2 eggs.
112	546	2	Taken from Dwarf Apple tree, at Freshwater, Manly, Sydney, on 7th December, 1901, by E. Hull, A. F. Basset. Hull, and Sid. W. Jackson. Nest was unusually large, and was placed six feet above the ground in the latter tree. Set of 2 eggs. I found many nests of this pigeon in the thick bush in the environs of Sydney, but only took eggs from four of them. Some were old nests, and were placed at heights varying from three to fifteen feet from the ground. These birds seem to have a decided preference in placing their nests in the Dwarf Apple tree (*Angophora cordifolia*), and the narrow-leaved Apple tree *(Angophora lanceolata)*, and I have never found them built in any others. Specimen A. measures = 1·27 × 0·93.
113	55[illegible]	2	PARTRIDGE PIGEON, *Geophaps scripta*, Temminck. Taken by C. A. Barnard near Rockhampton, Queensland, on 27th August, 1900. Set of 2 eggs.
114	530	1	ALLIED FRUIT PIGEON, *Megaloprepia assimilis*. Gould. Taken by H. Barnard, in the dense scrubs at Cape York, Queensland, during November, 1896. Set of 1 egg. The specimen measures = 1·43 × 1·01.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
115	554	2	WHITE-BELLIED PLUMED PIGEON, *Lophophaps leucogaster*, Gould.

Taken on the banks of the Nicholson River, North-west Queensland, by C. Woodlands, on 14th October, 1898. Set of 2 eggs. Specimen A. measures in inches = 1·09 × 0·87.

116	534	1	PURPLE-CROWNED FRUIT PIGEON, *Ptilopus superbus*, Temminck.

Taken by R. Hislop, in the Bloomfield River district, North Queensland, during October, 1894. Set of 1 egg.

117	531	1	RED-CROWNED FRUIT PIGEON, *Ptilopus swainsoni*, Gould.

Taken by Isaac Foster and Sid. W. Jackson, near my camp in the scrub at Booyong, Richmond River district, N.S.W., on 10th November, 1899. Nest was a very frail structure, and was placed in an entanglement of small vines at an altitude of 20 feet, and was difficult to approach without knocking the egg out of the flat nest. A single egg is the usual complement for a sitting. This handsome pigeon has a very mournful-like note, which we heard from daylight till dark, and it became quite monotonous to us. The birds were very plentiful in the Booyong and Binna Burra scrubs, in 1899, and we found several nests and eggs. They are familiarly known in the Richmond River scrubs as the Pink-headed Dove. The egg is pure white. This egg measures = 1·20 × 0·87.

118	541	2	BARRED-SHOULDERED DOVE, *Geopelia humeralis*, Temminck.

Taken at South Grafton, N.S.W., by Frank and Sid. W. Jackson, on 16th October, 1897. Nest was built in a tall Iron-bark Eucalypt (*Eucalyptus siderophloia*), in a thick upright fork, at an altitude of 50 feet. Set of 2 eggs. Specimen A. measures in inches = 1·08 × 0·88.

119	542	2	GROUND DOVE, *Geopelia tranquilla*, Gould.

Taken in Alipou scrub, South Grafton, Clarence River, N.S.W., by Frank Jackson and Sid. W. Jackson, on 16th December, 1894. Nest was built, if it can be called a nest, in a swamp Ti Tree (*Melaleuca*), at the edge of the scrub, at an altitude of 28 feet from the ground. Its construction consisted of about 30 short pieces of grass, laid in a flat fork of the latter paper bark tree. Set of 2 eggs. Specimen A. measures = 0·87 × 0·63. Specimen B. measures = 0·88 × 0·65.

120	543	2	LITTLE DOVE, *Geopelia cuneata*, Latham.

Taken on the banks of the Fitzroy River, North-west Australia, by G. A. Keartland, on 13th March, 1898. These are the smallest eggs of the *Columbæ* order in Australia. Set of 2 eggs. Specimen A. measures = 0·81 × 0·60.

121	537	1	NUTMEG PIGEON, *Myristicivora spilorrhoa*, G. R. Gray.

Taken by E. H. Webb, on Frankland Islands, Russell River, Queensland, on 4th January, 1905. Set of one egg. It measures = 1·78 × 1·23

122	535	1	PURPLE-BREASTED FRUIT PIGEON, *Megalopretia magnifica*, Temminck.

We found the nest and egg of this beautiful pigeon near our camp at Booyong, Richmond River scrubs, N.S.W., on 10th December, 1899. The nest was placed at the top of a tall leaning scrub Cherry tree (*Elæodendron australe*) in the scrub, and was very difficult to negotiate owing to the labyrinth of treacherous Lawyer vines (*Calamus australis*) which enveloped it. Taken by W. McEnerny and Sid.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			W. Jackson. This pigeon is without doubt the most magnificent we have in Australia, and is one of the largest. While at Booyong I had many opportunities of observing this fine species in its natural haunts, and was successful in finding two nests, each containing one rare egg. They feed chiefly on berries, &c., which they find abundantly in all parts of the scrubs, and when engaged feeding they often give their remarkable note or call, which resembles "To dolax to boo." The egg, like those of our other large pigeons, which also only lay one egg for a sitting, is pure white. This egg measures = 1·68 × 1·07.
123	544	3	LITTLE GREEN PIGEON, *Chalcophaps chrysochlora*, Wagler. Taken by Frank and Sid. W. Jackson, in Alipou Scrub, South Grafton, Clarence River, N.S.W., on 24th December, 1893. Nest was built on the horizontal branch of a Prickly Fig tree (*Ficus stephanocarpa*), leaning over Alipou Creek, and at a height of twelve feet. Nest was a very frail and flat structure, and composed of dead sticks and portions of the dried up vines of the Scrub Convolvulus (*Ipomœa palmata*). Set of 3 handsome eggs. This pigeon is frequently to be seen on the ground in the scrubs, where it appears to obtain most of its food. The nests are sometimes placed very low down, and some which we found in the scrubs at Booyong and Binna Burra, in the Richmond River district, in 1899, were only from four to six feet from the ground, one of them being built in the centre of a beautiful Birds nest Fern (*Asplenium nidus.*) Two eggs usually formed the full sitting, the clutch under notice being the only instance in which I found three. I saw these birds first in the scrubs on Stradbroke Island, Moreton Bay, Queensland, during January of 1885, and have since then seen them in almost every scrub which I visited in Queensland and New South Wales. The eggs are always of a beautiful rich cream colour. Specimen A. of this set measures = 1·20 × 0·90.
124	547	2	FLOCK PIGEON, *Histriophaps histrionica*, Gould. Taken in the interior of New South Wales in February, 1889. Set of 2 eggs.
125	532	1	ROSE-CROWNED FRUIT PIGEON, *Ptilopus ewingi*, Gould. Taken near Cairns, North Queensland, on 19th November, 1898, by W. Burton. Set of 1 egg. It measures = 1·20 × 0·88.
126	555	2	CRESTED PIGEON, *Ocyphaps lophotes*, Temminck. Taken on Buckiinguy Station, New South Wales, by J. Watson, on 18th October, 1897. Set of 2 eggs. Specimen A. measures = 1·30 × 0·93.
127	540	1	PHEASANT PIGEON, *Macropygia phasianella*, Temminck. Taken at Booyong scrubs, Richmond River district, N.S.W., on 7th November, 1899, by Sid. W. Jackson. The nest was built on top of that of the last season, and consequently made it appear unusually thick. This pigeon, I found, seemed to frequently use *decayed* leaves and sticks for its nest, and the egg cannot be seen through it from below, as is the case with most of those of the other pigeons. I found several nests and eggs during my stay in the latter scrubs. This bird, we found, always laid only one egg for a sitting. It is a poor and very clumsy flier, and resorts to damp parts of the scrubs, and where it is very dense. The furthest south that I have observed it was in the Never Never country of the Bellenger River district of N.S.W., in October, 1898. They often build their nests in the upright forks of the scrub trees, and seldom place them exposed on the thin limbs and vines, as so many of the other scrub pigeons do. The egg is of a light cream colour. Set of 1 egg, which measures = 1·45 × 0·97.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
128	538	1

TOP-KNOT PIGEON.

Lopholæmus antarcticus, Shaw.

This is the first authenticated egg of this pigeon known to science (see A. J. Campbell's book, page 672). It was taken by W. McEnerny and Sid. W. Jackson, at Booyong, 14 miles north-east of Lismore, in the Richmond River district of N.S.W., on 24th October, 1899. The nest was placed at an altitude of over 100 feet, in a tall Moreton Bay Chestnut or Bean-ball tree (*Castanospermum australe*), that had been left standing in a cleared belt of scrub, and which was enveloped by the Parasitical Fig tree (*Ficus rubiginosa*). The nests were most difficult to obtain, and my climbing ladder was put into use after a day's work in carrying it over fallen trees and vines. The task was a very big one, and one I shall never forget in my life, yet our work was well repaid, for these two rare nests each contained an egg. Both were in the same tree. The other egg has since passed into the possession of A. J. Campbell, of Melbourne, and which he looks upon as a very rare and historic specimen. These birds are very numerous in the scrubs of all the coastal rivers of northern New South Wales and Queensland, and many large flocks are frequently seen during April and May, when they congregate and feed on various berries, etc. Shooting parties often go out and wantonly destroy great numbers of these handsome pigeons during the latter months. I remember one instance that came under my notice, where nearly 400 were shot, in the Macleay River district of N.S.W., and were left to rot, only a few being taken away for table use. It seems remarkable that the nests and eggs of this species should be so very rare, when we take into consideration the vast flocks that visit us every year. During my visit to the Ourimbah scrubs, near Gosford, N.S.W., in April of 1904, I heard guns in every quarter, and many birds were shot and forwarded to Sydney. The egg is pure white, oval in shape, and slightly glossy, and the nest is a very frail structure of dead sticks, on which is laid the *single* egg. The specimen under notice measures = 1·64 × 1·16. [See page 16.]

W. McEnerny climbing the tree containing two rare nests of the Top-knot Pigeon. Set data, No. 128, came from the nest placed at the top cross. Loc., Booyong Scrubs, Richmond River, N.S.W.

129	539	1

WHITE-HEADED FRUIT PIGEON.

Columba leucomela, Temminck.

This rare egg was also taken near Booyong; it was found at Binna Burra scrubs, 18 miles north east of Lismore, New South Wales, on 18th Novem-

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

ber, 1899. The nest was built in a mass of tangled vines and sticks, hanging from a Booyong tree (*Tarrietia actinophylla*), and at an altitude of 60 feet. Taken by W. McEnerny and Sid. W. Jackson, Set of 1 egg, and measures = 1·53 × 0·97.

132 539 1

This is the first egg of this interesting pigeon that I took, and it is somewhat larger and more rounded than the latter specimen (No. 129.) It was taken in the scrubs at Beilsdown Creek, Don Dorrigo, Upper Bellinger River district of New South Wales, on 12th October, 1898. Nest built in vines in a Red Cedar tree (*Cedrela australis*), at an altitude of 45 feet. Taken by W. Williamson and Sid. W. Jackson. The eggs of this pigeon are exceedingly rare, and are represented in very few collections. In the Richmond River and Byron Bay scrubs this bird is locally known as the "Balley" or "Captain Cook" pigeon. Set of 1 egg, which gives the following measurements in inches = 1·56 × 1·12.

NEST AND EGG OF THE TOP-KNOT PIGEON.
Loc. Booyong Scrubs, Richmond River, N.S.W.
(Set data No. 128, page 15.)

131 548 2

ROCK PIGEON,
Petrophassa albipennis, Gould.

Taken during an expedition into Central Australia, on 1st March, 1897. Very rare. These eggs are not described in A. J. Campbell's book. This set contains 2 eggs, which are like those of others of our Australian pigeons. Shape elliptical, shell smooth and of a cream colour. Specimen A. measures = 1·06 × 0·80. Received from Chas. French, junr., Melbourne.

132 415 2

RUFOUS SCRUB BIRD,
Atrichia rufescens, Ramsay.

This set of eggs is the only one known to science, and its discovery was the means of putting in the "keystone" to the oological arch in Australia. It is the *first* discovered, and still remains so. (See A. J. Campbell's book, page 506.) So the missing link has at last been found. During my visit

to the scrubs of the rich Don Dorrigo country, in the Upper Bellenger River district of New South Wales, in October of 1898, I had some most interesting experiences, and paid special attention to the *Atrichia* during my stay, and was particularly bent on finding its nest and eggs, and lost no opportunities of following it whenever I heard its very shrill and penetrating note. They are exceedingly shy birds, and hide very suddenly, and like a mouse they crawl under some big log, or into a mass of dead leaves, sticks, and bushes, and thus dodge a person beautifully. They frequent parts of the scrub where it is damp and dense, and almost impossible for a man to get through, and appear to be quite terrestrial in their habits. On the 20th October, of 1898, a party consisting of four, including myself, left camp at 8 a.m., after enjoying a good breakfast of damper and curried Wonga Pigeon. We then entered the scrub at about six hundred yards from the camp, when almost immediately we heard the noisy Spine-tailed *Orthonyxes* crying out in all parts. Suddenly one flew from a nest which was built at the foot of a tree. (See photograph of it also in A. J. Campbell's book, page 252.) About three feet from this nest was a tuft of long green stiff grass (*Cyperaceæ sp.*), out of which immediately after the *Orthonyx* flew the *Atrichia*. We all rushed over, and found it contained two fresh eggs, and there was no doubt about them being those of the *Atrichia*, considering we all saw the bird fly from the nest. We then lay down concealed in the ferns and undergrowth, in the scrub, for nearly four hours, with gun ready, waiting for the return of Mrs. *Atrichia*, but it was all for nothing, not the slightest sight of the bird being obtained. It seems very remarkable that the female *Atrichia* has not yet been captured; all specimens so far obtained have been males, with the exception of one, which was caught at the nest at Booyong, near Lismore, N.S.W, and a description of which I will give in this data. I shot eleven at various times, and when I have dropped across them in pairs, yet on dissection they all proved to be *male* birds.

NEST OF THE RUFOUS SCRUB BIRD,
Atrichia rufescens, Ramsay.
Loc., Don Dorrigo Scrubs, New South Wales.
(Set data No 132.)

My next move was to photograph the nest in its natural position; then the clump of sedge-like grass (*Cyperaceæ*) containing the nest was dug up below the roots, all tied securely together, then carried to the "camp" and packed away, and the eggs also after they were blown. This rare find created much excitement and jubilation at the camp, knowing as we did that this set of eggs and the nest (which are quite unlike any others in Australia) were the *first* known to the scientific world. The following persons formed my nesting party, and were with me when the nest was found:—Frank T. A Jackson, L. Vesper, and Jno. McEnerny.

The nest is most remarkable, and unlike any other that I know of in Australia. It is dome-shaped, with at entrance at the side, and is composed of twigs, dead grasses, leaves, etc., very loosely put together. The only firm part about it is the lining, which is most extraordinary, and resembles coarse *papier-maché*, but on closer examination of this solid body, one finds that it is a dried pulp of soft and decayed wood, that the bird has worked up and put together while in a wet state. The eggs were simply laid on this hard cardboard-like rounded receptacle, and not a vestige of any other material was in the nest. I thought perhaps the eggs had been laid before the birds had finished lining it, but that is not the case, and I have proved it in a very substantial way.

When at Booyong scrubs, near Lismore, Richmond River, N.S.W., at the end of 1899, I found another nest of the *Atrichia* (during November), and built again in a tuft of rush-like grass, and the young had only left it a few days. This one I possess also, and is lined in exactly the same manner as the Don Dorrigo specimen, being of a hard cardboard-like nature, and has no other lining in it. These birds I found very plentiful at Booyong, Richmond River, N.S.W., in 1899, but of course they are nearly all driven away from those parts now (1907), owing to the progress in the dairying industry, necessitating the removal of the rich and beautiful scrubs.

We usually had great difficulty in getting a good distance shot at an *Atrichia*, simply on account of the way in which it confines itself to the masses of vines, fallen trees, and debris on the ground. However, when it does appear, it is frequently only a few feet from the muzzle of your gun, and in such cases it is better to leave it, for the bird is only blown to atoms, and thus rendered useless for any scientific purposes. I always had great difficulty in obtaining a perfect specimen on this account, notwithstanding that I used a proper specimen gun with specially prepared charges.

Watching the *Atrichia* in the Don Dorrigo Scrubs, N.S.W.

The *Atrichia's* nest, from which the set of 2 eggs was taken, gives the following measurements :— Placed 7 inches (in the tuft of grass) up from the ground, height of nest overall $7\frac{1}{2}$ inches, width of nest overall 4 inches, height of egg cavity, inside, 3 inches, width of egg cavity, inside, 2 inches, from back to front of nest inside $2\frac{3}{4}$ inches, opening of nest $2\frac{3}{4}$ inches. The food of the *Atrichia* I found consisted chiefly of snails eggs, young tender shelled snails, worms, and the larvæ and pupa of various *Carabidæ* and other Coleoptera, living among the damp masses of leaves on the ground in the scrubs.

The note of the *Atrichia* is a very shrill and *loud* penetrating "chirp" which is uttered slowly four times, "chirp-chirp-chirp-chirp," the last chirp being sounded a little lower than the others. The bird is a great mimic, and I have frequently heard it imitate to perfection the notes of the spined-tailed Log Runner (*Orthonyx spinicauda*), The Goshawk (*Astur approximans*), and Yellow-throated Scrub Wren (*Sericornis citreogularis*), etc. The Common Yellow Robins (*Eopsaltria australis*) about Sydney, when they give their four shrill chirp-like notes, resemble very much those of the *Atrichia*.

The particulars so far published concerning the *Atrichia* have been very fragmentary, and I am pleased to be able in these pages to give some original notes and descriptions of the bird and its habits. While camped at Booyong scrubs in 1899, I had many visits from my friend, Isaac J. Foster, who was working in an adjoining scrub, and showed him the *Atrichia's* nest which I found there, and gave him all information concerning this interesting species, *re* how, when and where they built, etc., in order that it might later on be of assistance to him in finding the nest and eggs, or a female bird. However, two years later (November 5th, 1901) he was successful in finding a nest near Booyong, and in the very locality I had advised him to watch, but unfortunately it contained two young birds, and was built near the ground in a clump of flat ribbon-like grass or sedge (*Gahnia sp.*), and a mass of debris among dead leaves at the head of a fallen tree. The nest had the same *papier-maché* or cardboard-like lining, as was the case with the two found by myself and already described here. In order to try and capture the female he raked a portion of the ground clear, about a foot from the front of the nest, and then took one of the young birds from it, and its cries soon brought the female along, and he caught her with his hand as she excitedly hopped about near her nest, the young bird was then placed back into the nest. The next move was to cage the specimen, and being camped in the scrub and having no such facilities, he placed her between two very large empty halves of the canoe-shaped pods of the Moreton Bay Chestnut or Bean-ball Tree (*Castanospermum australe*), and tied them together, after making a hole at each end as a means of admitting sufficient air. He kept the bird caged in this novel way for a few days, in hopes of meeting some person who could accommodate him with a temporary cage or box, and during this time he attended to the wants of the two young birds in the nest, and went twice a day and placed grubs and worms on the cleared spot in front of it, and the male bird took full responsibility and started to feed the young. However failure overtook him in securing anything to put the bird in, and he brought her back and liberated her at the nest, but not before he had taken a careful description. The young birds are grey all over, and the female, a description also of which has *never* been previously recorded, as far as I am able to ascertain, gives the following description :—About one inch shorter than the male, and possesses no whitish mark under the throat, as is the case with the male, the underneath parts being devoid of rufous and are grey instead ; the back and other parts are similar to those of the male. Having had the bird in his hand, and under close and favourable observation, he was thus enabled to give me this correct and valuable description, this being the first time a female had ever been handled.

Our Camp in the forest, outside Don Dorrigo scrubs, October 1898.

[A coloured illustration of one of these eggs will be seen in A. J. Campbell's book on "Australian Birds Eggs and Nests," on plate 16. On pages 506-7 are my notes relating to the find, also the accompanying photograph of nest in natural position, as shown on page 17.]

Specimen A. measures = 0·92 × 0·72.

Specimen B. measures = 0·87 × 0·72.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
133	52	4	GREY JUMPER, *Struthidea cinerea*, Gould. Taken by J. Watson, at Buckiinguy, Western New South Wales, on 12th October, 1900. These birds make a mud nest, like that of the Magpie Lark. Specimen A. measures = 1·17 × 0·86.
134	63	3	DRONGO, *Chibia bracteata*, Gould. Taken by Sid. W. Jackson, at St. Helena, Byron Bay, New South Wales, on 22nd December, 1899. Nest was built of thin twisted vines, and placed in a tree in the scrub, close to the road on Cooper's Shoot. The eggs are beautiful specimens. The note of this bird is very discordant. Specimen A. measures = 1·12 × 0·83.
135	220	5	BABBLER, *Pomatorhinus temporalis*, V. and H. Taken by Frank and Sid. W. Jackson, near South Grafton, New South Wales, on 26th August, 1894. Nest built in a Bloodwood Eucalypt (*Eucalyptus corymbosa*), at the extremity of a very long bough, and contained this beautiful set of 5 eggs. Specimen A. measures = 1·07 × 0·73.
136	220	3	Taken by W. McEnerny and Frank T. A. Jackson, at Hawthorneville, South Grafton, N.S.W., on 2nd September, 1894. Nest built in a Ti Tree (*Melaleuca*). I found that these birds seldom built in anything else in South-east Queensland. I have taken nearly every nest obtained there from the *Melaleuca*. Beautifully marked set of 3 eggs. Not only the egg, but the note of this bird is also very remarkable, and they often may be heard just at sun down barking away—"You zow, you zow, you zow." We found them very common about Grafton, in the Clarence River district, and I have counted eight of their large dome-shaped nests in one tree, and all placed at the very extremity of long horizontal branches of the common bush Apple tree (*Angophora subvelutina*). These happy creatures appear to build half a dozen nests, and only lay in one of them; the remainder are used by others of their tribe as roosting places at night. The nests are very warm inside, and the lining consists of a deep layer of dry bark and fur. When a lad going to school, these birds were familiarly known to the average schoolboy about Toowoomba and Brisbane as "Crackabarneys," and at Grafton, N.S.W., as the "Dog Bird." I had the pleasure of renewing my acquaintance with this species during March of this year (1907), when I saw both the birds and their nests on Belltrees Station, near Scone, N.S.W., and again listened to their notes, as several were perched in a tall River Oak (*Casuarina Cunninghamiana*) as I drove past, and their cry brought back to my mind many very pleasant recollections of my by-gone collecting days. Specimen A. measures = 1·07 × 0·76.
137	222	2	CHESTNUT-CROWNED BABBLER, *Pomatorhinus ruficeps*, Hartlaub. Taken near Dubbo, N.S.W., on 4th March, 1898. Set of 2 eggs.
138	223	3	RED-BREASTED BABBLER, *Pomatorhinus rubeculus*, Gould. Taken west of Rockhampton, Queensland, on 4th September, 1891. Beautiful set of 3 eggs.
139	221	2	WHITE-BROWED BABBLER, *Pomatorhinus superciliosus*, V. and H. Taken at Wagga Wagga, N.S.W., by T. Mullins, on 29th August, 1893. Set of 2 eggs.
140	172	2	BRISTLE BIRD, *Sphenura brachyptera*, Latham. Taken by A. Boon and Sid. W. Jackson, at Blicks River, near Tyringham, 55 miles south-west of Grafton, Clarence River, N.S.W., on 4th February, 1900. Nest built in tuft of rushes, near the river. It was a very frail structure, and would scarcely stand removal, and was dome-shaped and composed of dried grasses and leaves, etc., and warmly lined inside. I have taken several sets of these rare eggs

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			in the latter locality since 1893. Splendid set of 2 eggs, one larger and more heavily marked than the other. I found a nest of the Bristle Bird at Flat Rock, Middle Harbour, near Sydney, on 16th September, 1903, but only after patiently watching the birds for two hours. It was constructed of grass, and placed about eighteen inches from the ground in a clump of the large-leaved Swamp Banksia (*Banksia latifolia.*) The nest was just finished and ready for eggs, and I revisited the place again seven days later, but was much disappointed to find that a bush fire had in the meantime passed over a large area of the country there, and carried away with it my rare nest, and no doubt also a fresh set of eggs. Fortunately I photographed the nest during my first visit, which picture accompanies this description. The black dot on the top of the white cross points to the opening in this dome-shaped structure. Within twenty yards of the Bristle Birds' nest I took a splendid set of Emu Wrens' (*Stipiturus*) eggs on the above date ; it was fortunate that it contained eggs, and that I had not to leave it also for another week, for had I done so it certainly would have been burnt. For this latter set see data No. 53. I found both the Bristle Bird and Emu Wren fairly common in certain parts of Middle Harbour on the damp flats, where the Swamp Banksia or Honeysuckle abounds. Specimen A. measures = 1·12 × 0·77. Specimen B. measures = 1·06 × 0·78.
196	2		YELLOW-THROATED SCRUB WREN, *Sericornis citreogularis*, Gould. Taken at Ourimbah, near Gosford, N.S.W., by Sid. W. Jackson, on 10th December, 1905. This is a very dark set of eggs, with a deep zone on thick apex.
141			
451	1		FAN-TAILED CUCKOO, *Cacomantis flabelliformis*, Latham. Taken with the two latter Yellow-throated Scrub Wrens' eggs. It measures in inches = 0·83 × 0·57.
142	196	3	YELLOW-THROATED SCRUB WREN. *Sericornis citreogularis*, Gould. (See Illustration page 22.) Taken at the Little Plain, Don Dorrigo Scrubs, Upper Bellinger River district, N.S.W., on 12th October, 1898, by L. Vesper, Frank and Sid. W. Jackson. This is a beautifully zoned set of 3 eggs, but not so dark in the ground color as the previous set, No. 141. The eggs and nests of this species are both comparatively large, and the latter, which are dome-shaped structures suspended from the extremities of long thin branches of trees, leaning out over the small creeks in the scrubs, are often very handsome in their construction, frequently being beautifully decorated with skeins

NEST OF THE BRISTLE BIRD.
The dot on the top of the cross points directly at the opening of the nest.
Loc., Flat Rock, Middle Harbour, Sydney.

Data No.	No. in A. J. Campbell's Book.	No of Eggs.	
			of bright green moss. Sometimes they droop down within a few feet of the water, then again you will find them placed at a height of 30 feet. The accompanying illustration is from a photograph taken in the Don Dorrigo Scrubs, and shows my brother pointing to the nest from which this set (No. 142) was taken. Nest will be seen suspended below the white cross.
143	196	3	Taken near Tyringham, 55 miles south-west of Grafton, N.S.W., by Sid. W. Jackson, on 23rd October, 1898. This is a beautiful grey set, possessing smoke-coloured rings around the middle of the eggs, and having the tips of the thin or pointed ends whitish, with a grey spot in the centre which gives the eggs a most remarkable and artificial appearance. Set of 3 eggs were perfectly fresh when taken. Specimen A. measures = 0·95 × 0·68.
144	196	2	Taken at Nymboida, near Grafton, Clarence River, N.S.W., on 24th October, 1898, by Sid. W. Jackson. This is another remarkable set of these eggs. This pair is whitish, with the thick ends deeply smoked. This is the only set of these eggs I have seen marked in this way. Set of 2 eggs. Specimen A. measures = 0·94 × 0·67.
145	196	2	Taken in scrub, near Cloud's Creek, 45 miles south-west of Grafton, N.S.W., by A. Boon and Sid. W. Jackson, on 6th February, 1900. This set of 2 eggs concludes the beautiful series in the collection of these Scrub Wrens' eggs. This set is the white variety, with very few markings, and are the only ones I have seen of this type. Specimen A. measures = 0·97 × 0·72.
146	64	4	MAGPIE LARK, *Grallina picata*, Latham. Taken at the Common, near South Grafton, N.S.W., by W. McEnerny, Frank and Sid. W. Jackson, on 8th October, 1892. Ground color of this set is white, heavily spotted and blotched, particularly at the larger end. Set of 4 eggs. Nest built in Red Eucalypt tree (*Eucalyptus rostrata*.) These birds are very numerous on Belltrees Station, near Scone, N.S.W., and I found quite a number of their nests there, which were built in the River Oaks (*Casuarina Cunninghamiana*) growing on the banks of the Upper Hunter River.
147	64	5	This set of 5 eggs was taken near South Grafton, Clarence River, N.S.W., by Frank and Sid. W. Jackson, on 14th November, 1894. Nest built in Swamp Oak tree (*Casuarina glauca*). This set is pale pinkish-white, thickly spotted at the larger ends. The neat bowl-shaped nests of this well known bird, which are constructed of mud, are often placed at great altitudes, and we have taken their eggs over ninety feet from the ground; yet one instance came under my notice where the nest had actually been built on the bottom rail of a fence. The latter nest we found at Dallinga, South Grafton, during season 1894.
148	64	4	Taken by Frank T. A. Jackson, in Wall's paddock, South Grafton, Clarence River, N.S.W., on 1st October, 1892. This set of 4 eggs is of a beautiful deep salmon ground color, and beautifully zoned and blotched at the larger ends. Specimen A. measures = 1·22 × 0·82.

NEST OF THE YELLOW-THROATED SCRUB WREN.
The white cross is just above the suspended nest.
Loc., Don Dorrigo Scrubs, N.S.W.
(*See data No. 142, page 21.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
149	64	2	Taken at Frisch's paddock, at South Pine River, north-east of Brisbane, Queensland, by C. Frisch and Sid. W. Jackson, during December, 1884. This pair is white ground color, and very sparingly marked with small dots on larger ends.
150	64	4	This is the most interesting set of the series of Grallina's eggs, as it is an albino clutch ; they are *pure white*, and without a mark of any kind. Taken at Swan Creek, east of South Grafton, Clarence River, N.S.W., on 26th August, 1894. Taken by W. McEnerny, Frank and Sid. W. Jackson Set of 4 eggs. Nest was built in an Apple tree (*Angophora subvelutina*). Specimen A. measures = 1·12 × 0·85. Specimen B. measures = 1·17 × 0·86.
151	217	4	COACH WHIP BIRD, *Psophodes crepitans*, Latham. A set of 4 eggs for this bird is very rare ; however, these four came from the one nest and at the one time. Taken at Vinegar Hill scrub, Tyringham, 55 miles south-west of Grafton, N.S.W., on 16th August, 1895, by G. Covley. Beautifully marked clutch. Specimen A. measures = 1·07 × 0·79.
152	217	2	Taken in scrub at the Grafton Common, N.S.W., on 28th August, 1892, by J. Williams and Sid. W. Jackson. These 2 eggs are very large specimens, and most beautifully blotched. Specimen A. measures = 1·20 × 0·80.
153	217	3	Taken at Clontarf, Middle Harbour, Sydney, by Chas. Reid and Sid. W. Jackson, on 6th October, 1901. The ground colour of this set is of an unusually rich blue, and the markings, which consist of hair-like lines and hieroglyphics, are confined to the extremity of the thick apex. Handsome set of 3 eggs. Nest built in mass of vines of the wild Sarsaparilla (*Smilax glyciphylla.*) Specimen A. measures = 1·11 × 0·77.
154	217	3	Taken at Coutt's Crossing scrub, Orara River, near Grafton, N.S.W., on 2nd October, 1895, by Sid. W. Jackson. Very nicely marked clutch, but very much lighter in the ground colour, as compared with the latter, set No. 153. Set of 3 eggs. This concludes the handsome series of these eggs. Specimen A. measures = 1·15 × 0·82.
155	218	2	BLACK-THROATED WHIP BIRD, *Psophodes nigrogularis*, Gould. Clutch of 2 eggs, taken in the Blackwood River district of South-west Australia by S. Hall, on 1st September, 1897. These eggs are much paler in the ground colour to those of *P. crepitans*, of East Australia. Specimen A. measures = 1·11 × 0·73.
156	—	2	NORTHERN COACH WHIP BIRD, *Psophodes crepitans-lateralis*, North. (No. 224 Hall's Key.) I really think this northern form is a good species ; its note and its eggs are somewhat different to that of *P. crepitans*. This pair, however, was taken near Cairns, North Queensland, by T. Williams, on 23rd September, 1899, Eggs very small and pale color. Specimen A. measures = 1·03 × 0·75.
157	252	2	BELL BIRD, *Oreoica cristata*, Lewin. Set of 2 perfect specimens, taken near Bathurst, N.S.W., January 1st, 1889. Taken by a black tracker.
158	252	1	One egg, very elongated, taken at Tyringham, south-west of Grafton, N.S.W,, by A. Boon, during October 1890.
159	252	2	Beautiful set of 2 eggs. Taken on the Black Mountain, near Tyringham, Clarence River district, N.S.W., on 14th November, 1895. Taken by G. Rowles and Sid. W. Jackson. Nest built in a Blue Eucalypt tree (*Eucalyptus saligna*). Specimen A. measures = 1·03 × 0·80.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
160	391	2	SHINING STARLING, *Calornis metallica*, Temminck. Found in the Cape York scrubs, North Queensland. Set of 2 eggs taken by H. Barnard, on 28th November, 1896. One tree contained many nests, and H. Barnard counted 296 in it. Specimen A. measures = 1·07 × 0·81.

Drawer D.

161	477	1	RED-TAILED BLACK COCKATOO, *Calyptorhynchus stellatus*, Wagler. Taken by Professor Baldwin Spencer during his expedition into Central Australia. Set of 1 egg, taken during November, 1896. (See Campbell's book, page 609.) This rare egg measures in inches = 1·83 × 1·35, and seems rather small for such a large bird. In July, 1894, I found a nest of the Black Cockatoo (*Calyptorhynchus funereus*) in a tall hollow tree near Grafton, Clarence River, N.S.W., and it contained two young birds.
162	480	2	WHITE COCKATOO, *Cacatua galerita*, Latham. Taken at Nymboida, 30 miles south-west of Grafton, N.S.W., by an aboriginal named Nymboi Jack, on 30th September 1897. I saw the bird leave a hollow as I drove past, and then sent the nigger up to Nymboida in order to rob it for me. Nest was placed in hollow spout of a tall Flooded Eucalypt (*Eucalyptus rostrata*). Set of 2 eggs. I have frequently seen large flocks of these Cockatoos in Southern Queensland and North-eastern New South Wales, where they often do great damage to the grain crops. I noticed numbers of them on Belltrees Station, near Scone, N.S.W., during the early part of April this year (1907), where they were sporting in the tall and stately River Oaks (*Casuarina Cunninghamiana*), growing on the banks of the Upper Hunter River. We have often found their nests in the neighbourhood of Grafton, in the Clarence River district, and they were sometimes placed at a great altitude in the hollow spout of some Eucalyptus tree. Specimen A. measures = 1·92 × 1·35.
163	482	3	BARE-EYED COCKATOO, *Cacatua gymnopsis*, Sclater. Taken inland from Burketown, Gulf of Carpentaria, North-west Queensland, by C. Woodlands, on September 10th, 1897. Set of 3 eggs.
164	483	1	BLOOD-STAINED COCKATOO, *Cacatua sanguinea*, Gould. One egg, taken from the spout of a tree by C. Woodlands, near Burketown, North-west Queensland, on 10th September, 1897.
165	483	2	Two eggs (E.B.), taken in the interior of New South Wales on 9th November, 1890.
166	484	3	ROSE-BREASTED COCKATOO, *Cacatua roseicapilla*, Vieillot. Set of 3 eggs, taken from the hollow spout of a Eucalypt, by J. Watson, on Buckiinguy Station, Western New South Wales, on 3rd September, 1896.
167	485	4	LONG-BILLED COCKATOO, *Licmetis nasica*, Temminck. Taken on the Nicholson River, North-west Queensland, by C. Woodlands, on 4th January, 1898. Set of 4 eggs.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
168	479	2	GANG GANG COCKATOO, *Callocephalon galeatum*, Latham.

These 2 rare eggs were taken by Maxted, a bird trapper, in the mountains near Nowra, on the south coast of New South Wales, on 26th November, 1899. Nest was placed in a dead hollow spout of a Eucalypt tree, at an altitude of nearly 60 feet. These are the only eggs I have ever seen of this Cockatoo, and I think I was very fortunate to procure such rare specimens, as they are represented in very few collections. Specimen A. measures in inches = 1·40 × 1·07. Specimen B. = 1·32 × 1·07.

169	493	1	KING LORY, *Aprosmictus cyanopygius*, Vieillot.

This single egg was cut from the trunk of a tall dead tree on the Black Mountain, near Nymboida, Clarence River, N.S.W., on 1st November, 1898. It took nearly a whole day's chopping into the trunk of the tree before the nest was located, and all the time the climber, who sat in a seat, was suspended by a rope from a limb above, and he felt quite knocked out by the time he regained *terra firma*. The nest was placed 30 feet down the barrel of the tree, from the hollow at which the bird entered. The nest contained 3 eggs, two of which were unfortunately broken through the dirt and chips of wood falling into the hollow, notwithstanding that every precaution had been taken, and wadding was very carefully lowered down over the eggs prior to the last chopping. One rare egg, a perfect specimen. Taken by W. McEnerny and Sid. W. Jackson. This egg is roundish, and measures in inches = 1·34 × 1·13.

170	492	2	CRIMSON-WINGED LORY, *Ptistes coccineopterus*, Gould.

Taken at Burketown, Gulf of Carpentaria district, Queensland, by C. Woodlands, on 4th January, 1898. Set of 2 rare eggs. Specimen A. measures in inches = 1·27 × 0·99.

171	503	6	ROSELLA PARROT, *Platycercus eximius*, Shaw.

Taken at Myrniong, Victoria, by T. A. Brittlebank, on 7th October, 1897. Set of 6 eggs.

172	499	4	PALE-HEADED PARRAKEET, *Platycercus pallidiceps*, Vigors.

Taken by C. A. Barnard, at Coomooboolaroo, near Rockhampton, Queensland, on 6th September, 1898. Set of 4 eggs.

173	463	3	BLUE-BELLIED LORIKEET, *Trichoglossus novæ-hollandiæ*, Gmelin.

This splendid set of 3 eggs was taken from a Red Eucalypt (*Eucalyptus rostrata*), six miles from Grafton, Clarence River, N.S.W., by L. Vesper, J. McEnerny, Frank and Sid. W. Jackson, on 16th August, 1897. Nest was placed unusually low down, in a hollow spout, and was only 46 feet from the ground. The eggs are quite rust-colored from resting on the decayed wood and dirt

Frank T. A. Jackson up at the nest of the Blue-bellied Lorikeet.
Loc., near Grafton, Clarence River, New South Wales.
(See data No. 173.)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

in the hollow. Set of 3 eggs. The nests of this beautiful parrot we often found great difficulty in robbing, owing to the great altitude of the hollow in which the eggs were placed, and also the awkward and dangerous position of it. Even with the aid of my "tree-climbing ladder" we sometimes experienced much trouble in getting at the eggs, having often spent the whole day at the one nest. When laid these eggs are pure white, but soon become nest-stained, and turn to a rusty color on account of resting on the dust and decayed wood, so commonly found in the hollows of all Eucalypti trees. Two eggs form the full complement for a sitting, three being of very rare occurrence. The illustration on page 25 shows my brother (Frank T. A. Jackson) chopping out the nest which contained the set under notice (No. 173.) Specimen A. measures = 1·08 × 0·88.

174	464	2	RED-COLLARED LORIKEET, *Trichoglossus rubritorques*, V. and H.

Taken on the Nicholson River, North-west Queensland, by C. Woodlands, on 31st July, 1898. Set of 2 rare eggs.

175	465	3	SCALY-BREASTED LORIKEET, *Psitteuteles chlorolepidotus*, Kuhl.

Set of 3 eggs; two eggs are usually found. Taken from the hollow of a horizontal green limb of the Flooded Eucalypt (*Eucalyptus rostrata*), on the Grafton Common, Clarence River, N.S.W., on 23rd August, 1897. Nest was placed at an altitude of 88 feet, and as the accompanying photograph faithfully shows, the nest was in the limb just above the tomahawk which my brother is holding. L. Vesper will be seen on the ladder below my brother. Taken by L. Vesper, Frank and Sid. W. Jackson. Much chopping was done before the eggs were found, and it was most fortunate that none of them were broken by the chips of wood falling into the hollow. This lorikeet we found very common in the Clarence River district, and succeeded in taking over a dozen sets of their rare eggs. They soon become nest stained, and we have taken some quite brown. When collecting in the bush on W. Anderson's estate at Caramana, near Grafton, on 30th August, 1893, my brother (Frank T. A. Jackson) and I had a somewhat interesting experience with the robbing of a nest of this species. We saw one of these birds fly from a small round hole in the end of a short green horizontal limb of a Grey Eucalypt (*Eucalyptus punctata*), which was placed about 50 feet from the ground. On climbing up my brother chopped the end of the limb off, and then looked into the hollow, but could see nothing other than two bright objects of a phosphorescent or luminous appearance, and resembling eyes, which glistened down in the dark hollow. Fearing it might be a snake, he then burnt a piece of magnesium wire and placed it into the hollow, and imagine our surprise when we found these two bright objects were nothing else but two young birds with their mouths wide open, the latter being coated inside with this phosphorescent substance. It was our first experience of this kind,

Frank T. A. Jackson up at the nest of the Scaly-breasted Lorikeet.
Loc., near Grafton, Clarence River, New South Wales.
(*See data No. 175.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			and to us was a very interesting discovery. This luminous glow in the mouths of the young birds is in keeping with the general environments, and no doubt is one of nature's perfect arrangements in assisting the parent birds in locating and feeding the young in the dark hollow, and so facilitates matters that they can be safely fed. It seemed to be much brighter at the sides of the mouth, and I have since noticed this with some of the young of the Gouldian Grass Finch (*Poephila mirabilis*), in their dark dome-shaped nests, in Queensland. The light resembles very much the glow which is given off by that well known luminous fungus, or mushroom of the forests, which is known to us as *Pleurotus illuminans*. Probably this peculiarity exists also with the young of other Parrots, and also Pardalotes, Bee Eaters, Kingfishers, etc., which lay their eggs in dark places. Specimen A. of the clutch measures = 1·02 × 0·77.
176	527	2	SWIFT LORIKEET, *Nanodes discolor*, Shaw. Taken on 1st August, 1895, near Gerrymberrym, South Grafton, N.S.W., in a Eucalyptus tree, leaning over the edge of the swamp. Taken by Frank and Sid. W. Jackson. Set of 2 eggs. We only found the nest of this bird on three occasions, in the Clarence River district.
177	494	7	CRIMSON PARRAKEET, *Platycercus elegans*, Gmelin. Taken at Myrniong, Victoria, by T. A. Brittlebank, on 22nd September, 1898. Set of 7 eggs.
178	497	1	YELLOW PARRAKEET, *Platycercus flaveolus*, Gould. A single egg taken by J. W. Mellor, at Fulham, near Adelaide, South Australia, on 29th Aug., 1893.
179	490	1	BLACK-TAILED PARRAKEET, *Polytelis melanura*, Vigors. A single egg, taken in the Wimmera district, Victoria, during October, 1898. Received from A. J. Campbell.
180	509	3	MALLEE PARRAKEET, *Barnardius barnardi*, Latham. Set of 3 eggs, one chipped, through a piece of wood falling into the nest while it was being cut out. Taken by H. Scotney, at Harriman Park Station, South-west Queensland, on 28th September, 1899.
181	487	6	COCKATOO PARRAKEET, *Calopsittacus novæ-hollandiæ*, Gmelin. Set of 6 eggs, taken by H. Scotney, near Cunnamulla, South-west Queensland, on 1st October, 1897.
182	496	4	ADELAIDE ROSELLA, *Platycercus adelaidæ*, Gould. Taken from the hollow limb of a tree near Reed Beds, South Australia, by T. J. Howard, on 26th September, 1898. Set of 4 eggs.
183	467	4	MUSK LORIKEET, *Glossopsittacus concinnus*, Shaw. Splendid set of 4 eggs, taken by S. Robinson at Glenella, Blue Monntains, N.S.W., on 3rd September, 1897.
184	521	6	BLUE-WINGED GRASS PARRAKEET, *Neophema venusta*, Temminck. Taken at Bothwell, near Hobart, Tasmania, by A. W. Swindells, on 21st November, 1899. Perfect set of 6 eggs. Bird killed from nest for identification.
185	522	2	GRASS PARRAKEET, *Neophema elegans*, Gould. Taken by W. White, at Port Augusta, Flinder's Range, South Australia, on August 11th, 1895. Set of 2 eggs.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs
186	519	2

RED-BACKED PARRAKEET,
Psephotus hæmatonotus, Gould.

Taken by J. Hill, at Murtoa, Victoria, on 24th July, 1893. Set of 2 eggs. I saw many of these beautiful birds on Belltrees Station, near Scone, N.S.W., where I understand they breed freely.

187	514	5

RED-VENTED PARRAKEET,
Psephotus hæmatorrhous, Gould.

Clutch of 5 eggs, taken by J. Hill at Kewell, Victoria, on 11th November, 1893.

188	513	1

YELLOW-VENTED PARRAKEET,
Psephotus xanthorrhous, Gould.

Taken at Kewell, Victoria, on 10th September, 1894. A single egg. I have never been able to obtain a full set of the eggs of this species.

189	523	1

ORANGE-BELLIED GRASS PARRAKEET,
Neophema chrysogastra, Latham.

Taken by W. White at Reed Beds, near Adelaide, South Australia, on 30th November, 1898. A single egg.

190	515	1

BEAUTIFUL PARRAKEET,
Psephotus pulcherrimus, Gould

Taken by C. A. Barnard, near Rockhampton, Queensland, 20th May, 1896. The egg was deposited at the end of a tunnel, which the birds had made into a hillock or mound of the White Ant (*Termites*), situated on the ground.

191	518	3

MANY-COLOURED PARRAKEET,
Psephotus multicolor, Temminck.

Taken by W. White, at Yorke's Peninsula, South Australia, on 29th August, 1898. Set of 3 eggs. As usual the eggs were placed in the hollow limb of a tree.

192	471	2

BLUE-FACED LORILET,
Cyclopsittacus maccoyi, Gould.

This very rare pair of eggs was taken from a hollow bough of an old Scrub Fig tree (*Ficus*), near Cairns, Queensland, by W. Burton, on 18th October, 1899. The eggs of this species appear to be represented in very few collections.

Frank T. A. Jackson climbing to a nest of the Little Lorikeet.
Loc., Glen Ugie Peak, Clarence River, N.S.W.
(See data No. 193.)

193	469	4

LITTLE LORIKEET,
Glossopsittacus pusillus, Shaw.

Set of 4 eggs, nest-stained. Taken from the spout of a Red Eucalypt (*Eucalyptus rostrata*), and at an altitude of 76 feet. Taken by J. McEnerny, L. Vesper, Frank and Sid. W. Jackson, near Glen Ugie Peak, Clarence River district, N.S.W., on 21st October, 1894. Altogether we found several sets of eggs of this beautiful Lorikeet, and most of the nests were placed in the hollows of round green knobs, projecting out from the limbs of the various Eucalyptus trees. The eggs varied from two to four for a sitting. The accompanying photograph shows my brother, Frank T. A. Jackson, climbing to the nest of this bird, by chopping steps into the tree with a tomahawk, and holding on by a green vine which has been placed around the trunk, after the fashion of the aborigines, at which he was an expert.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
194	528	4	WARBLING GRASS PARRAKEET, *Melopsittacus undulatus*, Shaw.

Taken from the hollow limb of a tree, by J. W. Mellor, at Fulham, South Australia, on 11th November, 1896. Set of 4 eggs. These are the smallest eggs laid by any Australian parrot. Specimen A. measures = 0·70 × 0·56.

195	468	2	PURPLE-CROWNED LORIKEET, *Glossopsittacus porphyrocephalus*, Dietrichsen.

This pair of eggs was taken by W. White, at Dingo Creek, Flinder's Range, South Australia, on 24th September, 1894.

196	525	2	RED-SHOULDERED GRASS PARRAKEET, *Neophema pulchella*, Shaw.

Taken by Frank T. A. Jackson and W. McEnerny, at Lavadia, near South Grafton, Clarence River, N.S.W., on 15th August, 1897. Set of 2 eggs. Nest was very difficult to get at, and was placed at an altitude of 60 feet in an Iron-bark Eucalypt (*Eucalyptus siderophloia*).

197	462	4	SWAMP COUCAL, *Centropus phasianus*, Latham.

Taken by C. Woodlands, on the banks of the Nicholson River, Gulf of Carpentaria district, North-west Queensland, on 10th October, 1898. Set of 4 eggs. These eggs are much larger than those I have taken in the Clarence River district of New South Wales; an average specimen in this set measures in inches 1·59 × 1·26, while an average Clarence River specimen in the following set measures 1·45 × 1·11. I once found the eggs of this bird laid in an old nest of the Babbler (*Pomatorhinus temporalis*), which had been made flat by the Coucals pulling the top sticks and twigs away. The nest in question was built in a low tree near the Grafton Racecourse. The nests of the Coucal take a lot of hunting to find, as they are often so well hidden in the large patches of long grass reeds and weeds, etc., and necessitate much walking about and exploration before you have the luck to drop across one. The nest simply consists of the grass trampled down into a platform shape, about 5 or 6 inches above the ground, and is usually lined with the leaves of the Blood-wood Eucalypt (*Eucalyptus corymbosa*), when procurable; then again other leaves are used, such as those of the Swamp Mahogany (*Eucalyptus robusta.*) The top portions of the grass are drawn over, and the bird sits in its bower-like nest with its head out one side and the long tail the other. The young on leaving the shell are covered with white down, and remain in the nest sometimes for over two weeks. They frequent damp localities, which are overgrown with long grasses, etc., where they capture their food, which consists chiefly of grasshoppers, caterpillars, coleoptera, and other obnoxious insects, and the amount of these things they consume is amazing. Specimens dissected by me have been full of these pests, so the Coucal can safely be placed on the list of our insectivorous birds, and as one of the most useful. It is a poor flier, and, like the Lyre Bird, it has to ascend by a succession of hops up some small tree or leaning stump in order to fly, from the top of which it renders its peculiar bark-like note, and then clumsily flies down in a slanting direction to the desired spot. On the ground it is at home, and can run fast, and gets through the long grass and weeds with great rapidity. During November 1903 I was much surprised to see this bird in the grass and reed beds behind Long Reef Point, north of Manly, near Sydney; it is indeed rare to see it so far south, and during the season 1905 a nest containing 4 eggs was found in the latter locality, but was not taken, and the birds were given the opportunity of rearing their four young ones. This is the only Cuckoo in Australia which builds its own nest, and rears and attends to its young. I found it very common in the Richmond River district in 1899.

198	462	3	

Taken 6 miles up the Clarence River, above Grafton, N.S.W., on 19th November, 1894, by Frank and Sid. W. Jackson. Nest was built near the river bank, in long Blady grass (*Imperata arundinacea*), and contained 3 eggs. I found the nest by noticing the bird leave a tall clump of grass, and this I was enabled to do, as I was perched high up in a River Oak tree (*Casuarina Cunninghamiana*) at the

Data No.	No. in A. J. Campbell's Book.	No of Eggs.

time, robbing the rare nests of the Snake-necked Darter (*Plotus novæ-hollandiæ.*) We have taken five sets of Coucals' eggs in the Clarence River district. These eggs I find have always a thin coating of lime over them, the shell beneath being of a pure white. The note of this bird is very like the distant bark of a dog, and is kept up each time for about twelve seconds, and graduating from low to high notes, and *vice versa*. Specimen A. measures = 1·45 × 1·11. Specimen B. measures = 1·45 × 1·14. Specimen C. measures = 1·40 × 1·06.

199 435 4

DOLLAR BIRD,

Eurystomus australis, Swainson.

This beautiful clutch of 4 eggs was taken by W. McEnerny and Frank and Sid. W. Jackson, on 13th November, 1897. Nest was placed in a hollow spout of a giant Eucalypt, near Alipou Scrub, South Grafton, N.S.W., and at an altitude of over 90 feet. We have found many of these nests in years past, and took several sets of the eggs, but the birds generally build in such dangerous positions that it often renders it impossible for any person to get within arms reach of the nest. With us in Australia this bird usually puts in its appearance after a storm, during the early part of October, and departs again very often with a storm in February. During the recent visit of the Japanese warships to Sydney (1906), one of the officers informed me that these Dollar Birds are often to be seen in thousands on some of the mountains in Japan, and no doubt all our birds migrate there. Each season they seem to be getting more numerous with us here, yet, nevertheless, their eggs are hard to get, and that is simply because they select such very tall and inaccessible trees to nest in. I find that a very good imitation of the note of this bird can be produced by rolling together, on a sheet of wadding, two of their eggs (blown), and at the same time gently knocking them against each other. I found it out quite accidentally as I was busily engaged arranging the eggs in the cabinet. Two to three eggs, we found, usually formed the sitting, and not four. They are minutely pitted all over. Specimen A. measures = 1·33 × 1·07. Specimen B. measures = 1·33 × 1·06. Specimen C. measures = 1·32 × 1·07. Specimen D. measures = 1·29 × 1·10.

NEST OF THE SPINE-TAILED LOG RUNNER.
Loc., Don Dorrigo Scrubs, N.S.W.
(*See data No. 200.*)

200 2 4

SPINE-TAILED LOG RUNNER,

Orthonyx spinicauda, Temminck.

This is an interesting set of 2 eggs, on account of them having been taken from the nest close to that of the *Atrichia rufescens*. (See illustration of the nest in A. J. Campbell's book, page 252.) Taken by Sid. W. Jackson and party, at Bulabulah Creek, in the Don Dorrigo Scrubs of the Upper Bellinger River district of N.S.W., on 20th October, 1898. We have found over thirty of the nests, and have taken upwards of ten sets of these eggs in the northern scrubs of N.S.W., and they have always appeared to me as being very large for such a small bird. The eggs are now becoming very rare. The nests of this species are dome-shaped, with an entrance at the side, and are chiefly constructed of green moss,

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			sticks and dead leaves, and are easily overlooked and passed by, as they harmonize so much with the general surroundings on the ground. They are placed in a variety of situations—some at the foot of trees, and very neatly concealed between the buttresses at the roots, or up against an old log or under a fern, and many found during our visit to the Don Dorrigo scrubs of N.S.W., in October, 1898, were placed in masses of a flat green ribbon-like grass or sedge (*Gahnia sp.*), which was very plentiful near the creeks and damp parts of the scrub. The birds are always on the ground, and they make a great noise when busy scratching the masses of leaves in quest of food, and to hear one thus engaged a person would imagine it was a Scrub Turkey at work, and not this small quail-like *Orthonyx*. As soon as a person enters a scrub these birds give their shrill and very loud alarm-like notes, and the whole scrub re-echoes with the noise, and no other birds can be heard. Two eggs always formed the sitting, and in shape they varied from elliptical to elongated ovals. Specimen A. measures in inches = 1·16 × 1·80, Specimen B. measures = 1·13 × 0·80.

Drawer E.

201	577	4	RED-NECKED RAIL, *Rallina tricolor*, Gray. Taken by C. Woodlands, on the bank of the Nicholson River, Queensland, on 11th November, 1896. Set of 4 eggs. Specimen A. measures = 1·54 × 1·18.
202	575	4	PECTORAL RAIL, *Hypotænidia philippinensis*, Linnæus. Taken at Pearce's Creek, Booyong, Richmond River, N.S.W., on 9th November, 1899, by Sid. W. Jackson. Set of 4 eggs. This bird often lays as many as seven eggs. Specimen A. measures = 1·44 × 1·08.
203	574	3	SLATE-BREASTED RAIL, *Hypotænidia brachypus*, Swainson. Taken at Alipou Creek, South Grafton, Clarence River, N.S.W., by Sid. W. Jackson, on 31st July, 1892. Set of 3 eggs. We found these birds and their eggs very rare in the latter locality.
204	574	3	Taken by M. W. Harrison, at Risdon, near Hobart, Tasmania, on 17th October, 1897. Set of 3 eggs.
205	574	4	Taken by M. W. Harrison, at Risdon, Tasmania, on 6th October, 1900. This is a beautifully blotched clutch, and is much more heavily marked than the two former sets. Set of 4 eggs. Specimen A. measures = 1·37 × 1·06.
206	579	6	SPOTTED CRAKE, *Porzana fluminea*, Gould. This beautiful clutch of six rare eggs was taken from the reeds in a swamp near Hobart, Tasmania, by M. W. Harrison, on 19th November, 1898. This is the only set I have ever seen. Specimen A. measures = 1·28 × 0·94.

Data No.	No. in A. J. Campbell's Book	No. of Eggs
207	580	6

LITTLE CRAKE.

Porzana palustris, Gould.

This fine clutch of 6 eggs, which the accompanying photograph shows in the nest, was taken on Duck Swamp, Dallinga, South Grafton, Clarence River, New South Wales, on 1st January, 1895, by A. Amos, Frank, and Sid. W. Jackson. We found several nests and sets of eggs on the latter date, and the eggs varied from three to six for a sitting. The nests were all built in a long swamp weed, which is well known as Burney or Smart Grass (*Polygonum lapathifolium*), and this was growing in water about six inches deep. We had a dog with us, and he was the means of finding most of the nests. During my residence of nine years in the Clarence River district, I only found these birds breeding on this one occasion. An average specimen of this set measures in inches = 1·04 × 0·78.

208 582 3

WHITE-BROWED CRAKE,

Poliolimnas cinereus, Vieillot.

NEST AND CLUTCH OF SIX EGGS OF THE LITTLE CRAKE.
Loc., Duck Swamp, Clarence River, N S.W.
(*See data No, 207.*)

Set of 3 eggs, taken in the Nicholson River district, North-west Queensland, by C. Woodlands, on 3rd January, 1897. These appear to be rare eggs in collections, and, as far as I am able to ascertain, this is the *only clutch* that has been taken in Australia. The nest was built in grass and reeds on the edge of a Mangrove Swamp, and near a locality where the Jabirus breed regular every season. Eggs in other collections have been taken in Borneo, and the specimens in the collection of A. J. Campbell, of Melbourne, were received from the late Dr. Kütter, of Germany. The late John Gould, writing on this species, says:—"As the nests and eggs of this species have not yet been discovered, they form some of the *desiderata* to which I would call the attention of the rising ornithologists of Australia, and I can assure them that the study of the eggs will greatly assist them in assigning the birds to which they belong to their proper genus." (See A. J. Campbell's book, page 750.) An egg of this set measures = 1·10 × 0·87.

209 594 13

TASMANIAN SWAMP QUAIL,

Synœcus diemenensis, Gould.

Taken at New Town, near Hobart, Tasmania, by M. W. Harrison, on 7th January, 1899. Set of 13 eggs. These eggs are larger and more heavily blotched than those of *Synœcus australis*. Specimen A. measures = 1·26 × 0·99.

210 592 9

BROWN QUAIL,

Synœcus australis, Temminck.

Set of 9 eggs, taken by Sid. W. Jackson, at Caramana, South Grafton, Clarence River, N.S.W., on 9th November, 1893. Nest built in long grass, near the edge of a swamp. Specimen A. measures = 1·18 × 0·96.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
211	—	3	NORTHERN SWAMP QUAIL, *Synœcus cervinus*, Gould. (Sp. 490, Gould's Handbook.) Taken on the grassy banks of the Nicholson River, North-west Queensland, by C. Woodlands, on 17th August, 1897. Set of 3 eggs, almost devoid of markings.
212	561	9	STUBBLE QUAIL, *Coturnix pectoralis*, Gould. Clutch of 9 eggs, taken at Riverview, near Grafton, N.S.W., on 9th December, 1896. These birds seem to confine themselves to cultivated areas of land; every nest I have seen has been built in a crop of oats, pannican grass, or lucerne. Taken by Sid. W. Jackson. Specimen A. measures = 1.22 × 0·92.
213	568	4	PAINTED QUAIL, *Turnix varia*, Latham. Taken from under a tuft of grass, at the side of a track up a mountain opposite "Ashleigh," at Ourimbah, near Gosford, N.S.W., on 9th December, 1905. Taken by Sid. W. Jackson. Set of 4 eggs. Specimen A. measures = 1·22 × 0·88.
214	565	5	CHESTNUT-BELLIED OR KING QUAIL, *Excalfactoria lineata*, Scopoli. Beautiful clutch of 5 eggs, of the light green ground colour variety, taken in the lucerne paddock on S. Trimble's farm at Booyong, Richmond River scrubs, N.S.W., on 26th October, 1899. This is the first set of these eggs I have taken of the green ground variety, all others having been of the usual yellowish green or olive ground. Taken by W. McEnerny and Sid. W. Jackson. I have also found these birds in the swampy localities at Dee Why, north of Manly, near Sydney, where they were at one time very common. Specimen A. measures = 1·02 × 0·77.
215	570	3	RED-CHESTED QUAIL, *Turnix pyrrhothorax*, Gould. Taken by C. Reid and Sid. W. Jackson, at Beatson's yards, Hawthorneville, South Grafton, N.S.W., on 17th December, 1893. Set of 3 eggs. Specimen A. of this rare clutch of eggs measures = 0·95 × 0·76.
216	566	4	BLACK-BACKED QUAIL, *Turnix maculosa*, Temminck. This set of 4 eggs was really the commencement of the "Jacksonian Oological Collection," as they are the first eggs I collected of our native birds, and it was through possessing this clutch that I was first induced to start a collection. This set was taken by me at the South Pine River, north-east of Brisbane, Queensland, on 20th December, 1883, the nest being built of grass and placed on the ground in a field of what is locally known about Brisbane as "pannican grass." The eggs are unfortunately end blown, but nevertheless they are perfect specimens, and the holes are hard to detect, as they were very neatly made. I have seen these birds often in the Clarence River district of N.S.W., and found the eggs on three occasions; one nest was placed at the foot of a Castor Oil tree (*Ricinus communis*), near Alipou Scrub, South Grafton, N.S.W. Specimen A. measures = 1·97 × 0·78.
217	567	2	BLACK-BREASTED QUAIL, *Turnix melanogaster*, Gould. A pair of eggs taken at Gerrymberrym, near Grafton, Clarence River, by W. Anderson and Sid. W. Jackson, on 13th November, 1892. These are the only eggs of this bird which I have been fortunate enough to take. Specimen A. measures = 1·13 × 0·88.
218	572	2	WHITE-BELLIED QUAIL, *Turnix leucogaster*, North. Taken by C. E. Cowle, on the Finke River, Central Australia, during August, 1899. Specimen A. measures = 0·97 × 0·77.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
219	571	4	LITTLE QUAIL, *Turnix velox*, Gould. Set of 4 eggs, taken by S. Robinson, at Noorama, near Cunnamulla, Queensland, on 24th September, 1903. I found many nests and eggs of this species near Toowoomba, Queensland, during July, August, and September in 1889, and found them in the grounds of the Toowoomba Grammar School in 1884. Specimen A. measures = 0·90 × 0·73.
220	637	4	PAINTED SNIPE, *Rostratula australis*, Gould. This magnificent clutch of 4 eggs was taken at Buckiinguy Station, Western New South Wales, by J. Watson, on 20th October, 1898. This is the only full clutch of these rare and handsome eggs that I have ever seen, and they are among the most beautiful laid by our Australian birds. Specimen A. measures = 1·42 × 1·01.
221	637	2	This is a very heavily blotched pair of eggs, the markings being jet black. They are smaller and more pointed than the four former specimens in set No. 220. Taken by Sid. Coady, at Molly Station, Western N. S. Wales, on 3rd November, 1894. It seems remarkable that so many of our swamp birds resort to the western parts of New South Wales to breed.
			Before leaving the Snipe family it may be of interest to mention that our well-known Jack Snipe, or Longbills (*Gallinago australis*), of the sportsman do not breed here, as one might expect, but migrate every year to Japan for the purpose. It has been found breeding on the grassy flats at the foot of Mount Fuji-Yama, at an elevation of 3000 feet above the sea, and also in other localities in that province. Mount Fuji-Yama is 12,500 feet to its summit, and is now an extinct volcano.
222	600	4	RED-KNEED DOTTERELL, *Erythrogonys cinctus*, Gould. Beautiful clutch of 4 eggs, taken by S. Robinson at Opher Creek, South-west Queensland, on 8th November, 1898. I took one set of these eggs while at Grafton, New South Wales. Specimen A. measures = 1.22 × 0·86.
223	611	3	RED-CAPPED DOTTERELL, *Ægialitis ruficapilla*, Temminck. Taken by Sid. W. Jackson, on Duck Swamp, near Grafton, N.S.W., on 10th October, 1897. Beautiful set of 3 eggs.
224	611	2	Taken near Hobart, Tasmania, by M. W. Harrison, on 6th January, 1895. Set of 2 eggs. The eggs in this set are of a very pale ground colour as compared with the former set, No. 223. I quite recently had the pleasure of again seeing these pretty birds on Belltrees Station, near Scone, N.S.W., and where I understand they breed among the water-worn stones or shingle on the sides of the Upper Hunter River. The eggs are at all times difficult to find owing to their similarity to the ground and stones around them. Specimen A. measures = 1·22 × 0·92.
225	614	1	DOTTERELL, *Peltohyas australis*, Gould. One single yet perfect specimen of this very interesting bird's egg. It was taken near a dam by one of C. French's collectors, in the interior of New South Wales, on 3rd January, 1893. This is the *only* egg I have ever seen of this species. This egg measures = 1·52 × 1·05.
226	612	2	BLACK-FRONTED DOTTERELL, *Ægialitis melanops*, Vieillot. Taken by A. Amos, on the ground at the edge of Parra Swamp, near South Grafton, N.S.W., on 23rd September, 1894. Set of 2 eggs, one very heavily marked.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
227	612	2	Set of 2 eggs, taken from among broken lumps of dried mud, on the edge of Parra Swamp, near Grafton, Clarence River, N.S.W., by Sid. W. Jackson, on 9th November, 1895. Eggs were all covered with dry mud when found.
228	612	3	Clutch of 3 eggs, taken by Sid. W. Jackson, at Caramana, Clarence River, N.S.W., 12th March, 1897. The birds were numerous about the Clarence River swamps, and we found many of their eggs there. I have known this bird to even roll its eggs in mud, no doubt with the view of protecting them from observation, for when dry they exactly resembled the ground upon which they were deposited. Only quite recently a very interesting case respecting this active little bird was brought under my notice by a friend, for whom I can vouch for the authenticity of the story. He stated that on the roof of one of the sheds, on a large sheep station near Cunnamulla, South-west Queensland, a pair of these birds had selected a most peculiar site for their nest, the eggs actually being laid on the accumulated sand and dirt in the guttering on the roof of the shed, and the hen sat thereon quite contented in her elevated position. It is indeed very strange that this species, above all others, should associate itself with those of our other domestic bird pets, and is the only case of the kind that I have yet heard of. Specimen A. measures = 1·06 × 0·82.
229	613	3	HOODED DOTTERELL, *Ægialitis cucullata*, Vieillot. Clutch of 3 eggs, taken by D. Le. Souëf, on King Island, Bass Straits, on 18th October, 1890. Specimen A. measures = 1·45 × 1·04.
230	595	1	ORIENTAL PRATINCOLE, *Glareola orientalis*, Leach. This rare egg was taken from the edge of Duck Swamp, near Grafton, Clarence River, N.S.W., on 29th October, 1898, by Sid. W. Jackson. The bird was watched for a considerable time by the aid of field glasses before the nest was located. It answered Gould's description correctly, and to make sure of no error, the egg was forwarded to G. A. Keartland, in Melbourne, to compare it with specimens taken in Pegu, Lower Burmah, and it proved to be quite correct. This is the first and only egg of this bird, so far as is known, that has ever been taken in Australia. The egg was laid on a dried up belt of ground on the border of the above swamp, and had incubation about three days old. G. A. Keartland, of Melbourne, saw great flocks of these birds near North-west Australia, in 1897, and procured several skins at the Fitzroy River there, yet the eggs in his collection came from Akyab, Burmah, where they were collected in 1885. This egg measures in inches = 1·26 × 0·91.
231	594	1	PRATINCOLE, *Stiltia isabella*. Vieillot. One egg, taken on the edge of a dry belt of swamp land, at Caramana, South Grafton, N.S.W., on 30th October, 1898, by Sid. W. Jackson. I never saw this rare species in the locality before, and the Pratincoles are, therefore, quite strangers in the Clarence River district. This egg measures = 1·23 × 0·92.
232	573	3	PLAIN WANDERER, *Pedionomus torquatus*, Gould. This set of 3 rare eggs was taken by Chas. Gabriel, in a paddock at St. Arnaud, Victoria, on 6th November, 1900. These eggs are now very scarce, and several collectors of many years standing still have them on their lists of *desiderata*. The eggs are very pyriform, Specimen A. measures = 1·22 × 0·94.
233	610	2	RINGED DOTTERELL, *Ægialitis hiaticola*, Linnæus. Set of 2 eggs, taken in Swordle, Scotland on 28th April, 1883. Do not breed in Australia. Specimen A. measures = 1·41 × 1·03.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
234	626	4

COMMON SANDPIPER,

Tringoides hypoleucus, Linnæus.

Set of 4 eggs, taken in Northumberland, England, by W. Tristram, on 24th May, 1899. Do not breed in Australia. Specimen A. measures in inches = 1·47 × 1·03.

235	596	4

COMB-CRESTED PARRA.

Hydralector gallinaceus, Temminck.

(The Parra is known to the aborigines of the Clarence River district as the *Adid-a-warra*.)

Taken on Parra Swamp, near South Grafton, Clarence River, N.S.W., on 19th November, 1894, by Sid. W. Jackson. Nest was placed 18 feet from the edge of the swamp, and built on weeds in water four feet deep. Set of 4 eggs.

236	596	4

This set was taken at Caramana Swamp, South Grafton, opposite W. Anderson's homestead, and contained 4 eggs, two of which have only a few markings, and make the clutch look very odd. Taken by Frank and Sid. W. Jackson, on 1st January, 1895. The nest was situated fully 100 yards from the edge of the swamp, and built in a mass of large floating Water-lily leaves (*Nymphaea stellata*.) Set of 4 eggs. Specimen A. measures = 1·13 × 0·85.

NEST AND EGGS OF THE PARRA,

On Caramana Swamp, Clarence River, N.S.W. The eggs will be found just below the white cross.

(*See data No. 237.*)

237	596	4

This is a very handsome clutch of 4 eggs, and is the best marked set I have ever taken. The nest was built in a mass of the floating leaves of the small white Water Lily (*Marsilea*), on the top end of Caramana Swamp, near Gerrymberrym, Clarence River, N.S.W., on 4th January, 1897. Taken by Frank and Sid. W. Jackson. The white cross, which I have placed in the accompanying illustration, is just above the nest containing the four eggs. It will be noticed that the lily leaves, in shape, resemble a set of four eggs, on account of the petals being so pyriform. Specimen A. measures = 1·19 × 0·85.

238	596	4

This is a very dark clutch of four, and was taken by A. Amos and Frank T. A. Jackson on Parra Swamp, near the White Bridge, South Grafton, N.S.W., on 27th October, 1892, and is one of the first sets that passed into my possession. During January of 1891 I found a small portion of shell of a Parra's egg in the mud on the edge of a swamp near Grafton, and the curious markings on it set me thinking, and I made investigations at once, and the duck shooters informed me that it belonged to the long-toed Cobweb bird, or Parra. I then communicated with the Sydney Museum on the matter, and received particulars *re* the bird and its habits and eggs, etc., and was informed that they built their nests on the swamps, and laid four handsome eggs. The latter information was encouraging, and confirmed that supplied to me by the duck shooters. It was not long before I had luck, and early in 1892 forwarded a set to the latter institution, which the Curator was very pleased to receive. For my notes on this bird also, see A. J. Campbell's book on "Nests and Eggs of Australian Birds," page 774, and the accompanying illustration of nest, etc. The eggs are undoubtedly among the most remarkable in

Data No.	No. in A. J. Campbell's Book.	No. of Eggs

the world. The Parra is also found frequenting the swamps on the coast of Queensland, and was plentiful at one time about Rockhampton. In the Clarence River district I found that it starts to lay in October, and the breeding season lasts on up till the end of January, but there are times when it is somewhat altered, as often the general conditions of the rains have much influence in that respect, and thus govern the seasons to a certain extent. The Clarence River is its most southern limit.

The nests are difficult to find, notwithstanding their conspicuous situation, and I have sat for hours at a stretch watching the birds' manœuvres as they walked about on the reeds and floating vegetation in the swamp. We have seen them try to sink their nest a little, and the eggs are then resting quite in the water, and to do this both birds stand on the nest together as they see you approaching it. After they have accomplished this remarkable performance one bird (♂) flies away to the very end of the swamp, uttering his cry "wis-wis-wis-wis" as he proceeds; the other bird (♀), in the meantime, walks along in a crouched position on the reeds and floating leaves, etc., flapping her wings on the water as she proceeds, and thus giving a person the impression that they are broken. We have also noticed that the Parra, when sitting on the nest, pretends to be feeding if any person is near, or cattle wade out near her. The nest is not built in reeds, but on thick clumps of floating aquatic plants and Water Lily leaves, and mostly along the edges of the swamps, about twenty or thirty feet from the margin; yet there are times, however, when they are placed almost in the middle of the swamp, and it all depends on the position and quantity of the vegetation therein. The nest is a small structure, composed of fresh green herbage and weeds, and measures nine inches across, and is much smaller and cleaner than is the case with those of the Black-throated Grebe (*Podicipes novæ-hollandiæ.*) The eggs are always placed with the pointed ends turned inwards, and are usually four in number for a sitting, though on two occasions we have taken five eggs from each nest. One of the illustrations accompanying this description shows an unusually large and elongated egg of this species, and is one of a set of five (No. 238A); the ground colour, instead ot being yellowish-olive, is of a dirty or dull white, like that of a Grebe, but is covered with the same characteristic black wavy lines as those of the Parras. I am of opinion that this egg is probably the result of a cross between a Parra and a Black-throated Grebe, as the latter were breeding on the same swamp as the Parras. This large egg measures = 1·47 × 0·93. The eggs are hard to see even when you are quite close to them, and it is the intense gloss they possess that first catches your eye, and thus assists you in their location. The bird sometimes selects swamps during breeding season, which are covered with the large and superb Blue Water Lilies (*Nymphæa stellata*), the large floating leaves of which are ample foot hold or "stepping stones" for it; it is not web-footed, yet I have never seen it leave the swamps: and the most remarkable feature about it is the

THE HOME OF THE COMB-CRESTED PARRA.
(*Note the Nest and Bird among the large Water Lilies.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

extremely long toes (six inches and a half from back to front) and toe-nails which it possesses; with these it is enabled to travel with great rapidity over weeds and other floating aquatic herbage on the swamps and fresh water creeks. It is a grand spectacle to watch these curious birds parading among the bright and handsome blooms of the giant blue Water Lilies on the swamps, etc., as my brother and I have frequently had the pleasure of witnessing, during our residence in the Clarence River district of North-eastern New South Wales.

The illustration showing the large blue Water Lilies and the nest and bird, is from a photograph which I succeeded in taking one very windy day during November of 1897, but only after standing nearly four hours in a swamp, and up to my waist in mud and water, to say nothing of the stings I received from the various fresh water insects, etc.

Having found the nest, placed in such a magnificent position, I decided not to lose the golden opportunity, and made up my mind to photograph it, and after a long walk home got my camera and tripod, and also a preserved specimen of the Parra itself, which latter I placed on a large lily leaf near the nest. When the wind had considerably abated, the photograph was taken, two exposures of 4 seconds each being finally made after six o'clock p.m.

T. A. Brittlebank and F. T .A. Jackson hunting for the nests of the Parra, on Caramana Swamp, Clarence River, N.S.W.

The eggs of this curious bird are glossy and very handsome, the bizarre markings on them consisting of a labyrinth of black and dark yellowish-olive lines, turning and twisting in every conceivable direction, on a ground colouring which varies from yellowish to yellowish-olive, and possess quite a hand-painted appearance. It was the eggs of this species which so greatly interested His Excellency, Lord Northcote, G.C.M.G., G.C.S.I., C.B., Governor-General of Australia, and His Excellency Sir Harry H. Rawson, K.C.B., etc., State Governor of New South Wales, during their inspection of this collection at Federal Government House, Sydney, on the 18th August, 1904. I have from time to time helped many collections with these handsome eggs. Specimen A. of the clutch under notice measures = 1·18 × 0·84.

Very large and remarkable egg of the Parra, found with clutch Data No. 23SA.

(*Natural Size*).

238A	1906	5

This set of five eggs contains the very large specimen which I have already mentioned in the above notes on the Parra. This splendid clutch was taken on Duck Swamp, South Grafton, New South Wales, by A. Amos and Sid. W. Jackson, on 20th November, 1894. Four eggs of this interesting set are of the normal size, shape, and markings, etc., but specimen E is most extraordinary, and appears decidedly foreign to the others of the set, and as already stated is of a very dull greenish white, and rather like a freshly laid

egg of the Black-throated Grebe (*Podicipes novæ-hollandiæ*). It is very glossy, and well marked all over with the same black wavy lines as on those of the Parra; in all probability it is the result of a cross between the two species, as these Grebes are very common on Duck Swamp, where this clutch was found. On the very extremity of the larger end of this egg, there is a clear space, upon which a perfect figure 2 is portrayed, which also resembles a swan if carefully examined.

Strange markings on broad end of the large Parra's egg
(*Natural Size.*)

Accompanying these particulars is a natural size drawing, showing these marks, and has been made looking directly at the larger end of the egg.

The five eggs in this set give the following measurements :—

Specimen A. = 1·13 × 0·82.
„ B. = 1·17 × 0·80.
„ C. = 1·18 × 0·85.
„ D. = 1·20 × 0·83.
„ E. = 1·47 × 0·93 (large egg.)

The normal shape and size of the eggs of the Parra.
(*See data No. 238A.*)

Drawer F.

239 3 2

GREY GOSHAWK,
Astur cinereus, Vieillot.

This set of 2 rare Goshawks' eggs was taken near F. Mott's homestead at Byron Bay, N.S.W., by W. McEnerny, W. M. Parker, and Sid. W. Jackson, on 20th December, 1899. Nest was rather large for the size of the bird, and as usual was composed of sticks, and lined inside with several layers of green Eucalyptus leaves, and was placed in a tall Bloodwood Eucalypt (*Eucalyptus corymbosa*) at an altitude of 60 feet. The eggs had incubation about four days old. Specimen A. measures in inches = 2·02 × 1·62.

240 4 2

WHITE GOSHAWK,
Astur novæ hollandiæ, Gmelin.

Taken by C. Woodlands, from a tall Eucalypt near Burketown, Gulf of Carpentaria district, North west Queensland, on 16th January, 1898. The nest was a large stick structure, and thickly lined inside with a mass of green Eucalyptus leaves, and contained this handsome clutch of two eggs. We found a nest of this beautiful bird in the Don Dorrigo scrubs, N.S.W., during October of 1898, and after a climb of over 90 feet up a tall Hoop Pine tree (*Araucaria Cunninghamii*), we found it to contain only two young birds. (See A. J. Campbell's book, page 5.) Specimen A. measures in inches = 1·97 1·50. Specimen B. measures = 2·02 × 1·59.

241 5 2

LESSER WHITE GOSHAWK,
Astur novæ hollandiæ leucosomus, Sharpe.

Taken in the Nicholson River district, North-west Queensland, by C. Woodlands, on 28th August, 1899. Nest very like that of *Astur novæ hollandiæ*. Eggs, two in number, roundish ovals, and much

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			smaller than those of the latter. This set is boldly blotched with reddish brown, but the markings are not numerous. Both the latter clutches are marked very much alike; the size of the eggs is the principal distinction. They are mentioned in a foot note in A. J. Campbell's book, on page 6. Specimen A. measures in inches = 1·85 × 1·52. Specimen B. measures in inches = 1·87 × 1·47.
242	7	2	LESSER GOSHAWK, *Astur cruentus*, Gould. Taken by collector engaged by G. A. Keartland, at the Fitzroy River, North-west Australia, on 16th August, 1898. Perfect set of 2 eggs. Specimen A. measures = 1·82 × 1·45.
243	6	2	GOSHAWK, *Astur approximans*, V. and H. Set of 2 eggs, taken by A. H. Riggall, at Ross, Tasmania, on the 10th October, 1893. We have seen this bird in the Clarence River district, but never found any of their nests there. However, in the rich scrubs at Booyong, near Lismore, in November 1899, W. McEnerny and I found two nests of this species placed in the tall Booyong trees (*Tarrietia actinophylla*), and at an altitude of fully ninety feet. In these scrubs we frequently heard the *Atrichia* imitating the notes of this Goshawk to perfection. Specimen A. of the set under notice measures = 1·93 × 1·48.
244	8	3	SPARROW HAWK, *Accipiter cirrhocephalus*, Vieillot. Beautiful clutch of three eggs, taken from a tall Spotted Eucalypt (*Eucalyptus maculata*), on Blanch's Ridge, Clarenza, near Grafton, Clarence River, N.S.W., on 7th October, 1894. Nest was placed on a horizontal limb at an altitude of 86 feet. Taken by J. McEnerny, G. Rowles, Frank and Sid. W. Jackson. The tree was climbed by Frank T. A. Jackson, by chopping steps and using a green vine, after the manner of the aborigines, and at which he was an expert, and frequently got to the top of giant trees that the blacks had given best. A. J. Campbell mentions in his book that this bird lays from 3 to 4 eggs for a sitting. I think 4 must be of rare occurrence, as we have taken seven sets of the eggs, and never found more than 3, in fact 2 eggs seemed to constitute the sitting in most cases. Strange to say all the nests we found were built in trees near or leaning over a bush track, and in *every* instance they were placed in a Spotted Eucalypt. None of the nests were less than 70 feet from the ground. These little hawks often show fight, and get very savage when their nests are being robbed, and twice attacked us. Sometimes they build in the thick clusters of Mistletoe (*Loranthus celastroides* and *pendulus*), which are so common on the Spotted Eucalypt, etc. Specimen A. measures = 1·53 × 1·22. Specimen B. measures = 1·55 × 1·23. Specimen C. measures = 1·54 × 1·23.
245	16	3	KITE, *Milvus affinis*, Gould. Taken from tall Eucalypt at Lilydale, Gregory River, Queensland, by T. Williams, on 1st October, 1898. Beautiful set of 3 eggs. Specimen A. measures = 2·01 × 1·72.
246	17	2	SQUARE-TAILED KITE, *Lophoictinia isura*, Gould. Beautiful set of 2 eggs, taken from a nest built in an Iron-bark Eucalypt, at Rockhampton, Queensland. Taken by H. Barnard, on 7th November, 1898. Both eggs are very handsomely marked. Specimen A. measures = 2·05 × 1·58.
247	19	4	BLACK-SHOULDERED KITE, *Elanus axillaris*, Latham. This is a most magnificent clutch of 4 of these rare eggs, and was taken from an Apple tree (*Angophora subvelutina*) in W. Anderson's bush paddock at Caramana, near Grafton, Clarence River, N.S.W., on 27th July, 1898. The nest was placed in a very unusual position, being situated near the extremity

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

of a long *horizontal* branch of the tree, instead of in an upright fork, at an altitude of 55 feet, and a very strong westerly wind was blowing at the time my brother was nearing the nest, and I was greatly afraid the eggs would be blown out of it. When freshly taken these eggs were beautiful, and looked as if they had been clenched in a blood-covered hand. Taken by Frank and Sid. W. Jackson. These beautiful birds were very numerous in the Clarence River district in 1897, and we found several nests and sets of their eggs, but very few in 1898. (See A. J. Campbell's book, page 28, for my notes and illustration.) We generally "mirrored" all nests placed up overhead, before using a scoop or monkey pad, in order that we should know exactly what the nest contained. We have mirrored them 80 feet from the ground, and the man below with the field-glasses could always see, by the reflection in mirror, the whole contents of the nest. An average specimen of this set measures in inches 1·68 × 1·25.

248	19	3	

Taken at the rear of Alipou Scrub, South Grafton, N.S.W., in H. Asperry's paddock. The nest was placed at an altitude of 45 feet, in a Red Eucalypt (*Eucalyptus rostrata*), and contained this beautiful clutch of 3 eggs. They are much rounder than those of the other set, No. 247, and the ground color is white, and the markings are confined more to one end of the egg. The history of the taking of this set will long remain fresh in our minds, as my brother robbed the nest in the dark, and we were obliged to burn magnesium wire in order to give us sufficient light to work in. The nest was placed in a very awkward yet usual position, being at the top of a tall upright forked limb; so we brought the "monkey pad" into use to take the eggs from it, as an ordinary scoop was quite useless for a nest situated overhead. My brother got within four feet of the nest, then carefully lowered the prepared pad into the centre of it, above his head, and the three eggs stuck on, but just as he was carefully getting it in near to him one egg left it, and fell, but fortunately was cleverly caught by L. Vesper in a soft felt hat. The "monkey pad" is simply a flattened ball of wadding, covered with linen, the flat surface of same being smeared with a sticky preparation similar to bird lime, and once an egg touches it properly it is quite safe, and will never fall. It was very useful to us in getting eggs from nests which we were unable to scoop. This is the only occasion to my knowledge on which an egg fell from it, and that was due to the fact that we were working in the dark, and under very great disadvantage. The set was taken by L. Vesper, Frank and Sid. W. Jackson. These Kites usually built in trees that had a long dead upright limb towering over the green branches below, and on this stick the male bird would frequently be seen perched on the very pinnacle, and acting as sentinel. The birds feed chiefly on mice, which they capture in the fields of the cultivated areas along the banks of the Clarence River, and frequently we have found pellets of fur (one inch long) in the nests with the eggs, which the birds had ejected from their stomachs. On the wing these Kites resembled very much a Silver Gull (*Larus novæ hollandiæ*), both in appearance and flight, and when I first caught sight of them flying along the

NEST AND EGGS OF THE BLACK-SHOULDERED KITE.
Loc., South Grafton, Clarence River, N.S.W.
(See data No. 248.)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

banks of the Clarence River, I thought they were these Gulls, as the latter frequently came up the river as far as Grafton during rough weather on the coast.

The first time I saw the rare eggs of this handsome Kite, was when I took a set myself at nine o'clock at night, at Swan Creek, near Grafton, during the early part of season 1897. The nest was placed nearly fifty feet from the ground in an Iron-bark tree (*Eucalyptus siderophloia*), and as usual was hidden in a clump of foliage, and it was only with very great difficulty that I succeeded in taking the eggs from it. Having very little spare time at my disposal, I was often obliged to go and rob some of my nests at night, and a walk of ten or twelve miles after tea was a mere detail, provided we got the eggs we went after.

THREE YOUNG BLACK-SHOULDERED KITES IN THEIR NEST.
Loc., South Grafton, Clarence River, N.S.W.
(*See data No. 248.*)

These birds often built in trees near water, and we found some nests in trees which stood well out in the swamps.

An average specimen in this set measures in inches = 1·58 × 1·25.

249 20 3

LETTER-WINGED KITE,
Elanus scriptus, Gould.

Set of 3 rare eggs, taken near Nymboida, Clarence River district, N.S.W., by W. McEnerny and Sid. W. Jackson, on 29th June, 1897. We saw three or four pairs of these birds during the season 1897, but this is the only nest we were successful in finding. It was built in the top branches of a large paper-bark Ti Tree (*Melaleuca*), near the side of the road which leads to Armidale from Grafton. These eggs are not so richly marked as those of the Black-shouldered Kite. An average specimen of this set measures in inches = 1·73 × 1·27.

250 22 3

BLACK-CHEEKED FALCON,
Falco melanogenys, Gould.

Handsome clutch of 3 eggs (rare), taken near Copmanhurst, Upper Clarence River, N.S.W., by an aboriginal in the employ of G. Savidge, on 29th September, 1894. The eggs were laid in a basin, formed in the crumbling dust on the face of a perpendicular cliff of rocks, and fully a hundred feet from the ground. The darkie ran a great risk to both life and limb in obtaining this set of eggs; he was lowered down over the cliff by means of a long rope, and it was with the very greatest difficulty that he procured them. I found these birds also breeding on cliffs of rock at Nymboida, near Grafton, in 1894, but too dangerous to get at. An average specimen of this set measures in inches = 2·03 × 1·55.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
251	24	2

BLACK FALCON,

Falco subniger, Gray.

Set of 2 eggs, taken from the topmost branch of a tall Spotted Eucalypt (*Eucalyptus maculata*), at Lavadia, near Glen Ugie Peak, Clarence River district, N.S.W., by W. and J. McEnerny, Frank and Sid. W. Jackson, on the 3rd of November, 1895. See accompanying photograph, showing my brother up at the nest. This bird is chiefly confined to the more interior provinces of Australia, and seldom comes to the coast to breed, and this is the only time we observed it on the Clarence River. The eggs were laid in an old nest of the Whistling Eagle, and the ground beneath it was covered with quite a collection of bones and skulls of various small animals, which bore testimony to the many past feasts of these eagles. We frequently found their nests, and the ground beneath, strewn with bones, etc., and also numerous vertebræ of the common fresh water Cat Fish (*Copidoglanis fandanus*). Specimen A. is richly marked, and measures = 2·17 × 1·66. Specimen B. = 2·17 × 1·71.

Frank T. A. Jackson up at the nest (above black cross) of the Black Falcon.
Loc., Lavadia, Clarence River, N.S.W.
(*See data No. 251.*)

252	23	2

GREY FALCON,

Falco hypoleucus, Gould.

This rare set of 2 eggs was collected at Emerald, Mackenzie River, Queensland, by T. Williams, on the 23rd of September, 1898. The nest was placed in a Eucalypt, at an altitude of nearly 70 feet, but was comparatively easy to rob. I never remember seeing this bird on the coast of New South Wales; like the former, it is more confined to the interior parts. Specimen A. measures = 1·99 × 1·55. Specimen B. measures = 2·06 × 1·55.

253	25	3

LITTLE FALCON,

Falco lunulatus, Latham.

This splendid set of 3 eggs was taken at Ti Tree Creek, near South Grafton, Clarence River, N.S.W., on the 7th of October, 1894. The nest, which was constructed of sticks, and lined with Eucalyptus leaves, was placed in the topmost branches of a giant Spotted Eucalypt (*Eucalyptus maculata*), at an altitude of 90 feet, and was a very difficult and dangerous climb. Taken by J. McEnerny, Frank, and Sid. W. Jackson. We noticed very few of these Little Falcons in the Clarence River district, and only succeeded in finding this one clutch of eggs. It seems very remarkable that all the *Accipitres* in the latter district build so frequently in the Spotted Eucalypti; many of these trees, which grow to an immense size, and are situated in prominent positions on the ridges looking down into the rich Clarence River valley, often have large nests, or the remains of them, in their lofty boughs, and are very conspicuous, and can be seen a long way off, the majority of them being those of the Whistling Eagle. An average specimen of the set under notice measures = 1·62 × 1·31.

254	28	4

NANKEEN KESTREL,

Cerchneis cenchroides, V. and H.

Splendid clutch of 4 eggs, taken from the hollow spout of a dead Eucalypt on the south bank of the Orara River, near Ramornie, Clarence River, N.S.W., by W. McEnerny and Sid. W. Jackson, on the 26th of October, 1897. I found this bird very common about Toowoomba, Q., and frequently

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			found its nests there, in dead trees standing adjacent to cultivated areas out Drayton way. On Belltrees Station, near Scone, N.S.W., during March of this year (1907), I saw several of the birds hovering over the beautiful open country there, and no doubt they breed in such an ideal spot. The four eggs under notice are beautifully blotched, and Specimen A. measures = 1·50 × 1·22.

Drawer G.

255 10 2

WEDGE-TAILED EAGLE,
Uroaetus audax, Latham.

This beautiful set of 2 eggs, which are very round specimens, was taken from a huge nest in a Flooded Eucalypt (*Eucalyptus rostrata*), on the north bank of the Orara River, near Coutt's Crossing, ten miles from South Grafton, N.S.W., on the 15th of October, 1892. The set was taken by Frank and Sid. W. Jackson.. We found other nests of this eagle on the Clarence River, but they were usually old ones. I visited a large nest once during the season 1897, which was situated on the horizontal branch of a very large Stringybark Eucalypt (*Eucalyptus macrorhyncha*) on the Black Mountain, on the road between Grafton and Armidale. The nest must have been there for many years, judging from the pile of debris which had accumulated beneath it, which was then over eighteen inches deep, and around which were scattered hundreds of bones and the skulls of various small animals. Specimen A. measures = 2·72 × 2·30. Specimen B. measures = 2·67 × 2·30.

256 10 2 Splendid set of 2 eggs, not so rounded as those of the former set, No. 255, and the markings are more evenly distributed. Taken by J. Watson at Buckiinguy Station, Western New South Wales, on the 24th of July, 1900. This fine bird, like many others of its family, is rapidly becoming exterminated in the western parts of New South Wales, owing to the great number that are being indirectly poisoned through the attempts which have been made to try and kill the rabbits, which have now become such a great pest to the pastoralists. Not only the hawk family, but also various other species have been killed in thousands through partaking of set baits, and drinking poisoned water, which had been placed for the rabbits. Hawks' eggs will be very rare items before long if the old-fashioned scheme of poisoning these rodents still continues. Of the set under notice Specimen A. measures = 2·87 × 2·20. Specimen B. measures = 2·97 × 2·34.

257 13 2

WHITE-BELLIED SEA EAGLE,
Haliaetus leucogaster, Gmelin.

This plain and unpretentious looking clutch of 2 rare and perfect eggs, was taken near the Government Experimental Farm at Grafton, Clarence River, N.S.W., on the 14th of August, 1898, by J. McEnerny, Frank and Sid. W. Jackson. (See A. J. Campbell's book, page 18, and illustration.) We made two visits to the nest before we succeeded in taking the eggs from it, and it was placed at an altitude of over 100 feet in a large Spotted Eucalypt (*Eucalyptus maculata*), and was reached by the aid of my tree-climbing ladder, and the eggs were taken by my brother, Frank T. A. Jackson. (See accompanying photographs.) The nest contained three eggs, one of which got broken in transit, and was quite beyond my skill to repair; it was an unfortunate accident to us, and it took me some time to forget such an irretrievable loss. The nest was a wonderful structure, and measured nearly seven feet across by five feet thick, and bulky enough to fill a dray, some of the sticks used in its construction being as thick as a man's wrist. It was lined with many layers of *green* Eucalyptus leaves, which tend so frequently to discolor the eggs, and they are used, no doubt, for the purpose of generating heat. It is

only when a collector has to treat with nests such as this, that he realizes and knows exactly what proper tree climbing is, and the amount of work it involves, but not before. There is a curious thing about the photograph herewith, which depicts the robbing of this nest, and is, I think, worthy of explanation; immediately below the nest on the left edge, will be seen a perfect profile of the head of King Edward the VII, in the V shaped fork, and facing the nest, and below it his body can easily be traced out, the coat tail going into the dead forked tree below, and the space between the two trees his legs. It is a splendid profile of His Majesty, and it seems quite a strange coincidence that his figure should so appropriately and yet so naturally be displayed, facing the nest of our noble "King of Birds," viz., the White-bellied Sea Eagle. We found six nests of this bird in the Clarence River district, but succeeded in getting eggs from only two of them. It is a grand sight to climb up and look into one of these huge nests or platforms, which usually command a splendid view of all the surrounding country. These birds, although nearly always frequenting coastal country, are often seen as far as a hundred miles inland, and where they sometimes breed. I have seen them about Sydney, and only quite recently my attention was directed to one of their nests, which was built in a tall Eucalypt on a rocky ridge near French's Creek, at the head of Middle Harbour, near Sydney. On Susan Island, in the Clarence River, opposite Grafton, we saw two nests, and no doubt they are still there to this day. One of them was placed in a giant Scrub Fig tree (*Ficus macrophylla*), which measured eighteen feet in diameter at the base, and the other nest was built

Frank T. A. Jackson up on the huge nest of the White-bellied Sea Eagle.
Loc., near Grafton, Clarence River, N.S.W.
(*See data No. 257.*)

F. T. A. Jackson coming down from the nest.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			in a tall Blue Eucalypt (*Eucalyptus saligna*), which was nine feet through. Both these nests were place at an altitude of over ninety feet, and within half a mile of one another, and in 1895 my brother climbed up to them, and although they appeared quite clean and new, they contained no eggs; it was very disappointing after such tedious and difficult climbing. Our first set of these eggs was taken from a tall Blackbutt Eucalypt (*Eucalyptus pilularis*) near the sea shore, south of the Clarence River Heads, during September of 1896. The eggs vary both in size and shape, and I have seen some specimens very round, though as a matter of fact they are in most cases pointed ovals, such as the set now under notice. I engaged two aborigines at Grafton during season 1895, to go hunting for the eggs of this eagle, and equipped them with the necessary rations, etc., and after a month's absence they returned, their spoil consisting of a few Soldier Birds' and Magpies' eggs; I was disgusted, and never sent them on such a mission again. I found that these darkies will not hunt or climb unless they are directly under your personal supervision. Of set No. 257 Specimen A. measures = 2·88 × 2·09, and has many marks or nest stains on it, and no doubt when first laid both eggs were quite white. Specimen B. measures = 3.07 × 2·09.
258	29	2	WHITE-HEADED OSPREY, *Pandion leucocephalus*, Gould. This very handsome clutch of two eggs was taken at North-west Cape, Western Australia, by a collector engaged by G. A. Keartland, on the 29th of July, 1897. The nest was constructed of sticks and lined with sea weed, and placed on a low rock on the sea coast. We have seen this fine bird on the coast of Queensland and New South Wales, but were never fortunate enough to find any of its nests. Specimen A., which is beautifully blotched, measures = 2·57 × 1·90. Specimen B. measures = 2·57 × 1·85.
259	14	2	WHITE-HEADED SEA EAGLE, *Haliastur girrenera*, Vieillot. This pair of rare eggs was taken by C. Woodlands from a very tall tree on the banks of the Nicholson River, North-west Queensland, on the 16th of January, 1897. The eggs of this bird are represented in very few collections. Specimen A. is much larger and less marked than specimen B., and measures = 2·23 × 1·68. Specimen B. is a smaller egg, and is very finely marked all over, and no person would ever think it came from the same nest; it measures = 2·05 × 1·57.
260	15	3	WHISTLING EAGLE, *Haliastur sphenurus*, Vieillot. This handsome clutch of 3 eggs was taken on the 21st of August, 1898, by L. Vesper, W. Crawford, Frank and Sid. W. Jackson, from a nest found in a large Spotted Eucalypt (*Eucalyptus maculata*), at Gerrymberrym, Upper Clarence River district, New South Wales. See accompanying photograph. From this the birds commanded a splendid view, and could survey the whole of the surrounding country, as the tree which contained the nest stood in such an elevated position on the ridge. This set varies greatly in the markings, and Specimen A. is the best marked egg of this Eagle that I have ever seen, and as we have from time to time handled nearly 70 of these eggs, my choice therefore, in claiming this specimen as an exception to the rule, has been made from the total result of many years of arduous collecting and practical experience. It measures = 2·25 × 1·67. Specimen B. is a much rounder egg, and the markings are not so large, it measures = 2·28 × 1·75. Specimen C. is the smallest egg of the three, and the markings are of a dull purple, the majority of which appear as if beneath the surface of the shell, a peculiarity which is noticeable in the eggs of many birds; it measures = 2·23 × 1·64. These birds seldom lay three eggs for a sitting, two usually being the full complement. During our residence in the Clarence River district we climbed to 73 nests of this Eagle, and the full history of which would alone fill a book, and from which we procured eggs from nearly half; sometimes they built near the edge of the swamps and creeks, in Swamp Oak trees (*Casuarina glauca*), at a height of only 45 feet, but they generally confined themselves to the very large trees on high ridges, or hills, and any eggs we got were always *well earned*. I noticed that these Eagles usually sallied forth in

Data No.	No. in A. J. Campbell's Book.	No of Eggs.

pairs before a storm, circling high overhead, and frequently uttering their peculiar loud whistling cry. They have a decided liking for fish, and these they pick up on the banks of rivers and creeks, and chiefly comprise those of the common fresh water Cat Fish (*Cofidoglanis fandanus*) and Eels (*Angnilla reinhardtii*), which the fisherman cast aside. During their piscatorial feasts these Eagles leave quantities of fish, etc., in the nests, which soon decay and gives them a filthy and repulsive appearance.

The nests measured from two to three feet across. During season 1897 I found a nest of the Black-shouldered Kite (*Elanus axillaris*) being built in a tall Eucalypt in Walker's paddock, at Dallinga, South Grafton, and when the Kites had quite finished building it, the Whistling Eagles took possession and hunted the Kites away. Later on, however, I took a beautiful clutch of Eagles' eggs from this very nest (see data No. 262), and as the bird sat thereon a great portion of her was plainly visible from the ground, and her tail projected far over the edge of the Kite's small nest. We have taken the eggs of this Eagle during every month of the year, as the following dates will show :—

1st January, 1893.	10th July, 1898.
4th February, 1894.	21st August, 1898.
19th March, 1893.	25th September, 1898.
10th April, 1897.	2nd October, 1898.
24th May, 1898.	9th November, 1896.
20th June, 1896.	16th December, 1896.

For my notes on this bird, see A. J. Campbell's book, page 21 ; also, illustration opposite page 20 in same.

Frank T. A. Jackson up on a limb near the nest of the Whistling Eagle.
Loc., Gerrymberrym, Clarence River, New South Wales.
(See data No. 260.)

261	15	2

Taken on 10th July, 1898, in Spotted Eucalypt (*Eucalyptus maculata*) in Parkinson's paddock at Caramana, near Grafton, Clarence River, N.S.W., by Frank and Sid. W. Jackson. The nest was placed at an altitude of 90 feet, and the eggs were obtained by my brother, Frank T. A. Jackson, who chopped steps into the tree and used a strong green vine to hold on by. This is the most remarkable set of these eggs we have ever taken, owing to the distinct difference between them in the coloration and markings. Specimen A. is beautifully blotched and marked with reddish-brown, and particularly at the larger end, and measures = 2·25 × 1·65. Specimen B. is a very strange looking egg, and no person would ever think it came from the same nest. It is absolutely *devoid* of all natural markings of the reddish-brown form, and is a dirty white, covered all over with smudges or nest stains of a light yellowish-brown. It measures = 2·34 × 1·72.

262	15	2

This is a very fine set of 2 eggs, the ground color of which is nice and clean, and they are well spotted with rich reddish-brown markings. Specimen B. has the zone of markings at the pointed end, while Specimen A. has it at the thick apex. We collected this set just as a severe hail storm was coming on, and before my brother took the eggs from the nest one of them got slightly fractured by a hailstone striking it after the Eagle flew off. The nest was built in an upright limb of a Red Eucalypt (*Eucalyptus rostrata*), growing in Walker's paddock on the edge of Duck Swamp at Dallinga, South Grafton, N.S.W., and was robbed on the 15th of August, 1897. Taken by Frank and Sid. W. Jackson. The nest in which this set of eggs was deposited was built by a pair of Black-shouldered Kites. The Eagles, however, hunted the Kites away, and took possession of it, and the latter then resorted to and laid in the Eagles' old nest close by. Specimen A. measures in inches = 2·27 × 1·73. Specimen B. measures = 2·27 × 1·70.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
263	11	2

LITTLE EAGLE,
Nisaetus morphnoides, Gould.

Set of 2 eggs, taken by C. E. Cowle, at Illamurta, on the Finke River, Central Australia. The nest was placed in a tall Eucalypt, and difficult to secure, and was constructed of sticks. The eggs were slightly incubated. Taken on 6th March, 1899. The Little Eagle was on the nest when the native commenced to climb the tree. We found one nest of this bird in the Clarence River district, but after a difficult climb found the eggs just hatching. The nest was placed at the giddy altitude of 126 feet, in a giant Flooded Eucalypt (*Eucalyptus rostrata*), the climbing operations being performed by my brother, Frank T. A. Jackson. As already stated the eggs were just on the point of hatching, and of course they were rendered quite useless as oological specimens. I broke both eggs in halves, and preserved the young birds, keeping the shell as a memento of our greatest climb, and probably one of the highest of its kind made by any person in Australia. Specimen A. of the pair measured = 2·27 × 1·76. The find was made by my brother and I on the 27th of August, 1898, near Southgate, Clarence River, N.S.W. The eggs of this bird resemble very much those of the Whistling Eagle, so great care should be exercised in carefully identifying the birds prior to taking them, otherwise they are valueless to a scientific and methodical collection. Specimen A. of set under notice (No. 263) measures = 2·25 × 1·77. Specimen B. measures = 2·26 × 1·75.

264	9	2

RED GOSHAWK,
Urospizias radiatus, Latham.

This set of 2 rare eggs was taken by T. Williams, near Emerald, Mackenzie River, Queensland, on the 16th of September, 1898. Nest built in large Eucalypt at an altitude of 75 feet. One egg (Specimen A.) was in a very advanced state of incubation, but was successfully emptied of its contents; it measures = 2·23 × 1·72. The other egg (Specimen B.) was an addled specimen, and was easily blown. Both eggs have very few markings, but possess dirty brown or nest stain discolorations. Specimen B. has one rich reddish-brown dot and a few yellowish-brown smears; it measures = 2·19 × 1·75.

265	21	4

CRESTED HAWK,
Baza subcristata, Gould.

This is the best set of these rare eggs that I have ever taken or seen anywhere. The nest was placed in the topmost branches of a lofty Spotted Eucalypt (*Eucalyptus maculata*) growing on the ridge above Harrington Creek, at Lavadia, near Grafton, Clarence River, N.S.W. It was exactly 87 feet from the nest to the ground, and W. McEnerny and Frank T. A. Jackson negotiated with the taking of the eggs for me on this occasion, which was on the 17th of October, 1897. In seasons past we have taken several clutches of these much prized eggs, but never before did we take a set of four. It is a lovely clutch, the eggs are thickly marked all over with light yellowish-brown nest-like stains, and specimens A. and B. have a few dark brown markings, and are rounder types than those of C. and D. We have never experienced any trouble while robbing the nests of this beautiful species, as the Hawks are very quiet, and fly to a tree a few hundred yards away, and there sit quite contentedly, and return to the nest again after our climbing operations are finished. This bird I have seen frequently fall down on top of the Box Eucalyptus saplings (*Eucalyptus hemiphloia*) with outspread wings, and there remain in that position eating grubs, beetles, etc., from the foliage; we have often seen them in the scrubs in the Clarence River district, but not their nests; they prefer getting well into the heart of the forest to breed. In nine years we found eleven of these nests, and were fortunate in getting eggs from six of them, and all in big trees. This set of 4 was taken by W. McEnerny, Frank, and Sid. W. Jackson. The first nest and eggs which we found of this handsome species was on the 22nd of October, 1893, and the nest was placed, at an altitude of nearly 90 feet, in a Spotted Eucalypt, on a stony ridge behind J. Morris's orange orchard, and situated about three miles from South Grafton, N.S.W. The nest contained three eggs, which were, unfortunately, in a very advanced state of incubation. (See A. J. Campbell's book, page 30.) The clutch measures as follows:—Specimen A. = 1·72 × 1·43; Specimen B. = 1·72 × 1·43; Specimen C. = 1·73 × 1·40; Specimen D. = 1·82 × 1·37.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
266	1	2	SPOTTED HARRIER, *Circus assimilis*, J. and S.

Clutch of 2 eggs, taken from a low Ti Tree (*Melaleuca*), near Ulmarra, Clarence River, N.S.W., on the 3rd October, 1896, by W. McEnerny and Sid. W. Jackson. Nest was only 25 feet from the ground, and was a frail structure lined with the paperbark and green leaves of the Ti Tree. This is the only nest and eggs I have found of this so-called Swamp Hawk, although we have noticed the bird a good deal about the Clarence River district. The eggs are white, and have a few nest stains, and measure as follows :—Specimen A. = 1·97 × 1·54 ; Specimen B. = 1·90 × 1·51.

267	2	2	SWAMP HAWK, *Circus gouldi*, Bonaparte.

This pair of eggs was taken near Somerville, Victoria, by G. Shepherd, on the 8th of November, 1897. Nest was built on the ground amongst Scotch Thistles (*Cardmis lanceolatus.*) Eggs white, and very slightly nest stained. Specimen A. measures in inches = 2·03 × 1·51. Specimen B. measures = 1·97 × 1·51.

268	27	2	BROWN HAWK, *Hieracidea orientalis*, Schlegel.

Set of 2 eggs, taken from a Crow's nest situated in the very bushy top of a tall Spotted Eucalypt (*Eucalyptus maculata*), near the Lake at the back of Swan Creek, Clarence River, N.S.W., on the 4th of September, 1895. This is the only clutch of these rust-colored eggs we have ever taken in the Clarence River district ; the bird is rather uncommon there. Taken by Frank and Sid. W. Jackson. We took a set of Crows' eggs from this very identical nest during season 1894. (See data No. 590.) Specimen A. measures in inches = 2·08 × 1·52. Specimen B. measures = 1·97 × 1·52.

269 27 3 Beautiful clutch of 3 eggs, taken by C. Ladwig at Werribee, Victoria, on the 6th of October, 1905. An average specimen of this set measures = 2·13 × 1·60.

270	26	2	STRIPED BROWN HAWK, *Hieracidea berigora*, V. and H.

A very pretty clutch of 2 eggs, taken by F. E. Howe at Bacchus Marsh, Victoria, on the 9th October, 1904. The dark zone is on the pointed end of both these eggs, instead of at the thicker apex, and makes an interesting clutch on that account. Specimen A. measures = 2·07 × 1·55. Specimen B. measures 2·07 × 1·55.

Drawer H.

271	641	2	CASPIAN TERN, *Hydroprogne caspia*, Pallas.

Set of 2 eggs, taken by A. Zietz on Kangaroo Island, South Australia, on 16th November, 1891. One egg is rather small, and almost devoid of markings.

272 641 2 Set of 2 eggs, taken by a collector engaged by C. Woodlands on Sweers Island, Gulf of Carpentaria, Queensland, on the 11th November, 1898.

273	644	2	CRESTED TERN, *Sterna bergii*, Lichtenstein.

One egg forms the clutch, but this pair was taken from a nest by a collector engaged by C. Woodlands, on Sweers Island, Gulf of Carpentaria, on the 11th of November, 1898. Eggs not so pointed as those I have taken in New South Wales.

Data No	No. in A. J. Campbell's Book.	No. of Eggs.	
274	644	1	Taken from Julian Rock, in Byron Bay, New South Wales, by W. McEnerny and Sid. W. Jackson. We visited this small island, north of Cape Byron, on the 18th of November, 1899, and found the birds breeding everywhere on it. The following series of these beautiful eggs ranges from data No. 274 to 282, and shows a truly wonderful variation in their markings, some having a white ground color, others stone, purplish, grey, etc. Some possess spotted surfaces, others are blotched, and look as if ink had been poured over them, while again some of this series possess very long wavy lines, such as we find on the eggs of the Spotted and Regent Bower Birds.
275	644	1	Data ditto. It measures = 2·22 × 1·63.
276	644	1	Data ditto.
277	644	1	Data ditto.
278	644	1	Data ditto. It measures = 2·52 × 1·58.
279	644	1	Data ditto. It measures = 2·63 × 1·65.
280	644	1	Data ditto. It measures = 2·27 × 1·63.
281	644	1	Data ditto.
282	644	1	Data ditto. It measures = 2·38 × 1·62.
283	649	2	WHITE-SHAFTED TERNLET, *Sterna sinensis*, Gmelin. Taken on the 9th of November, 1894, by Chas. Reid and Sid. W. Jackson, on a sand spit at Yamba, at the mouth of the Clarence River, N.S.W. The eggs were laid in a slight depression on the sand. We found many eggs, but most of them were on the point of hatching. An egg of this set measures in inches = 1·22 × 0·97.
284	649	2	Taken by the same persons on the previous date and locality. The ground color of this set is much darker than those of set No. 283. The eggs vary greatly in size, shape, color and general markings. An egg of this clutch measures = 1·33 × 0·95.
285	648	2	WHITE-FACED TERNLET, *Sterna nereis*, Gould. Set of 2 eggs, taken near the Cocked Hat Rock, south of Byron Bay, N.S.W., by W. McEnerny, and W. M. Parker, on the 19th of December, 1899. Many other nests were found containg young birds. A specimen of this set measures = 1·40 × 0·93.
286	650	1	BLACK-NAPED TERN, *Sterna melanauchen*, Temminck. Taken on a small island off Cape York, Torres Straits, Queensland, on the 16th of November, 1876, by the late Samuel White, the well-known naturalist. The egg of this Tern is at all times exceedingly difficult to obtain; I have only seen this one specimen, and regret to say it is not a perfect one. Received from J. W. Mellor.
287	647	1	SOOTY TERN, *Sterna fuliginosa*, Gmelin. Clutch of 1 magnificent egg, taken at Norfolk Island, Pacific Ocean, on the 1st of November, 1886. This specimen measures = 2·13 × 1·43.
288	647	1	Taken on Lord Howe Island, Pacific Ocean, on the 31st of October, 1891. Beautiful egg.
289	647	1	Taken on Lord Howe Island, on the 10th of November, 1897.
290	655	1	WHITE TERN, *Gygis candida*, Gmelin. Clutch of one, a beautiful egg, taken by Dr. P. H. Metcalfe, on Norfolk Island, Pacific Ocean, on the 28th of October, 1892. This bird often deposits its eggs in the fork of a horizontal limb of a low tree near the sea beach. The egg measures = 1·80 × 1·22.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
291	643	1	LESSER-CRESTED TERN, *Sterna media*, Horsfield. Taken on South Barnard Islands, on the coast of Queensland, on 23rd November, 1891.
292	643	1	Taken on same date and island as previous egg. This egg is smaller than that of No. 291. Both sets were taken by H. Barnard.
293	653	1	LESSER NODDY, *Micranous tenuirostris*, Temminck. Clutch of one egg, taken on Norfolk Island, East of Australia, on the 7th December, 1886. Taken by Dr. P. H. Metcalfe. It measures = 1·72 × 1·35.
294	653	1	One egg, taken by R. Helms on Pelsart Island, on the coast of Western Australia, on the 21st of November, 1897. This is a beautifully zoned egg, and measures in inches = 1·80 × 1·27.
295	640	2	GULL-BILLED TERN, *Gelochelidon anglica*, Montagu. Set of 2 eggs, taken on the edge of a swamp in the Riverina district, Victoria, on the 19th November, 1887. One egg has a pale creamy white ground, while the other specimen is of a dark cream, with a tinge of green in it.
296	652	1	NODDY TERN, *Anous stolidus*, Linnæus. Clutch of one egg, taken by R. Helms on Pelsart Island, Western Australia, on the 13th of November, 1897. It measures = 2·01 × 1·38.
297	651	1	GREY NODDY TERN, *Procelsterna cinerea*, Gould. One egg, a clutch taken by Dr. Crowfoot from the ledge of a cliff on Philip Island, near Norfolk Island, on the 4th October, 1882. This egg measures in inches = 1·72 × 1·17.
298	646	1	BROWN-WINGED TERN, *Sterna anæstheta*, Scopoli. Clutch of one egg, taken by A. J. Campbell on Duck Island, near Rottnest Island, Western Australia, on the 21st of November, 1889. This egg measures in inches = 1·84 × 1·26.
299	642	2	ROSEATE TERN, *Sterna dougalli*, Montagu. Taken on Pelsart Island, Houtman's Abrolhos, Western Australia, by A. J. Campbell, on the 23rd of December, 1889. (See his book, pages 834 and 835.) This is a beautiful clutch of eggs. Specimen A. measures in inches = 1·79 × 1·13. Specimen B measures = 1·59 × 1·08.
300	645	1	WHITE-FRONTED TERN, *Sterna frontalis*, Gray. Taken on the Opihi River, New Zealand, on the 9th of November, 1896. The egg was placed on the shingle, just above high water mark. Frequently only *one* egg is laid for a sitting. From J. W. Mellor. This egg measures = 1·85 × 1·26.
301	639	3	MARSH TERN, *Hydrochelidon hybrida*, Pallas. Beautiful clutch of 3 eggs, taken on a swamp by H. Scotney, at Shamrock, near Cunnamulla, South-west Queensland, on the 20th of December, 1903. I have frequently seen these pretty birds flying over the swamps on the Clarence River, but never knew of them to breed there; I think they go well into the interior parts for that purpose. An average specimen of this set measures in inches = 1·47 × 1·10.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
302	638	1	WHITE-WINGED TERN, *Hydrochelidon leucoptera*, M. and S.

One egg, taken in New Zealand in November, 1889. Unfortunately I have no further data respecting this rare egg; it seems a pity that many collectors are so careless with their data. I have frequently had to write and ask for particulars of certain eggs which I have received in exchanges.

303	726	1	GANNET, *Sula serrator*, G. R. Gray.

Clutch of one egg, taken on Cat Island, Bass Straits, by F. H. Morton, on the 12th of November, 1891. The natural line is so thick on this egg that a person would really think it had been applied artificially. The eggs of nearly all birds of aquatic habits are found to be lime-coated, because the substance generates warmth when the wet breast of the hen comes in contact. The eggs of the following are more or less lime coated:—Pelicans, Ibis, Spoonbills, Penguins, Grebes, Cormorants or Shags, Gannets, Snake-necked Darters, Swamp Coucal, etc.

304	720	3	LARGE BLACK CORMORANT, *Phalacrocorax carbo*, Linnæus.

Splendid clutch of 3 eggs, taken by Sid. W. Jackson near Nymboida, Clarence River district, N.S.W., on the 20th of September, 1897. The nest was built on the horizontal limb of a small Swamp Oak (*Casuarina glauca*) leaning over a freshwater creek at the foot of the mountain range. The eggs had incubation about six days old, but I succeeded in blowing them neatly. An average specimen of the set measures = 2·40 × 1·54.

305	723	3	LARGE PIED CORMORANT, *Phalacrocorax hypoleucus*, Brandt.

Set of 3 eggs, taken by J. W. Mellor at the Coorong, South Australia, on the 1st of October, 1894. One egg of the set measures = 2·34 × 1·57.

306	722	3	WHITE-BREASTED CORMORANT, *Phalacrocorax gouldi*, Salvadori.

Set of 3 eggs, taken by Sid. W. Jackson at Iluka, at the mouth of the Clarence River (North Head) N.S.W., on the 9th of November, 1894. Nest was composed of grass and twigs, and placed on top of a tall stump, not far in from the main beach. An average specimen of this set measures = 2·47 × 1·45.

307	721	4	LITTLE BLACK CORMORANT, *Phalacrocorax sulcirostris*, Brandt.

Clutch of 4, taken from a nest built in a Red Eucalypt (*Eucalyptus rostrata*) at Harrington Creek, Lavadia, Clarence River, N.S.W., by L. Vesper, G. Cutney, Frank and Sid. W. Jackson, on the 11th of September, 1898. The trees were full of nests; I never found such a big colony of birds breeding before; when we climbed the trees we saw eggs everywhere we looked. The nests were all constructed of sticks and green twigs, and placed in Swamp Oak, Mahogany, and Eucalyptus trees at altitudes varying from 20 to 45 feet. The nests measured 18 inches across, and were in a filthy condition, and one had to be very careful climbing the trees, especially the smooth-barked gums or Eucalypts, as the limbs were so slippery, and we had to do a bit of greasy pole work without a doubt. The Little Black and White Cormorant also had its nests mixed with those of this species, likewise the Snake-necked Darter. The uproar and stench from all these birds, when we climbed the trees, was just terrible. We had egg blowing to do that day properly, and the back of my ears suffered very much from it afterwards, as that afternoon we blew nearly 1000 eggs altogether, including the three species. I shall not forget the incident, as it was the first and only time we had ever found these Cormorants breeding, and it is very probable that we may never come across such a colony of them again. An average specimen of this set measures = 1·96 × 1·32.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
308	724	4

LITTLE BLACK AND WHITE CORMORANT,

Phalacrocorax melanoleucus, Vieillot.

Set of 4 eggs, taken with many others at Lavadia, Clarence River, N.S.W., on the 11th of September, 1898. (See A. J. Campbell's Book, page 978.) Like the preceding species we found these birds breeding in hundreds; their nests were similar to those of the Little Black Cormorant, and also the eggs, and we had to exercise great care in taking them in order not to get the sets and the two species mixed. Each set was numbered in pencil as it was removed from the nest, to thus avoid any possibility of a mistake. The eggs of both species varied from 2 to 5 for a sitting, but 3 eggs seemed to be the usual number in most cases. The trees were simply alive with birds sitting upon their nests, and their peculiar croaking noise sounded like thousands of frogs. These birds are very destructive to young fish, and destroy vast quantities of them, and the various Governments have from time to time been buying up dead birds at so much a head, in order to try and reduce their numbers. What about our account if they allowed us a bonus on each egg we took of these useless creatures.? Taken by L. Vesper, G. Cutney, Frank and Sid. W. Jackson. During the latter part of May this year (1907), the Fisheries Board in Sydney received an intimation from Inspector Paton upon the condition of Smith's Lake, which is situated a little south of Cape Hawke, on the north coast of New South Wales, and reference was made to a curious habit of the Cormorants (locally known as Shags), amongst the fish. The inspector stated that the methods of the birds showed a remarkable sagacity. The lake is splendidly stocked with many varieties of fish, owing to its rest from the use of fishing nets for 18 months, and many of the smaller species are present in incredible numbers. The birds, which infest the lake number many thousands, and carry on their depredations amongst the fish with a marvellous amount of discipline and concerted action. One flock, which was estimated to contain about 2000

Tree containing 30 nests of the Little Black and Little Black and White Cormorant.
Loc., Lavadia, Clarence River.
(*Note the four men up the tree at the nests.*)

Canoe displayed with nests and eggs of the Little Black and Little Black and White Cormorants. Loc., Lavadia, Clarence River.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			Cormorants, was observed driving the shoals of fish off the weed-covered flats, where they were protected, into the clear and shallower water, where they could be more relentlessly attacked. The army of birds poised, wheeled, and plunged amongst the shoals in a serried line, and drove the fish before them irresistibly. The water would boil for a few minutes with the bodies of the plunging birds, who, as if at a given signal, would rise clear to sight their prey, and again and again swoop down upon them, until the fish were driven into the desired place. They feasted until they were gorged. It will be seen therefore that the destructive habits of these birds, amongst young fish, is a very serious matter, and is the cause of great loss, and some steps should be taken to effect a remedy. An average specimen of this set measures = 1·93 × 1·18.
309	724	5	Splendid set of 5 eggs. Locality and data same as latter set, No. 308. All the eggs of the Cormorant family are thickly lime-coated, and beneath the lime the egg is of a pale greenish blue, the surface of which is minutely pitted all over. This clutch shows the blue here and there between the clouds, or irregular shaped patches, of lime on them, and makes it a very interesting and pretty set.
310	725	3	SNAKE-NECKED DARTER, *Plotus novæ hollandiæ*, Gould. Set of 3 eggs, locality and data same as preceding set of Cormorants (No. 308.) Nest was placed 35 feet from the ground, on a short horizontal branch of a Swamp Oak (*Casuarina glauca*), leaning over Harrington Creek, on the 11th of September, 1898. For full particulars see data No. 307. An average specimen of this set measures = 2·13 × 1·47.
311	725	3	Set of 3 eggs, taken at Gerrymberrym, above Grafton, on the Clarence River, New South Wales, on the 19th of November, 1894. The nest was built in a River Oak (*Casuarina Cunninghamiana*), which stood on the very edge of the river bank, and was situated at an elevation of 30 feet, on a horizontal limb leaning out over the water. I still have the nest in my possession, and the limb upon which it was built. It is a large stick structure, measuring 20 inches across, and has a very slight depression in the centre for the eggs. This is one of the *first* clutches of these rare eggs taken in New South Wales, that is to say, as far as records show us. We noticed that both birds sit on the nests in turn. When taking this clutch, the birds left the Oaks, and circled high up overhead above the nest, and they gradually got higher and higher, until their large forms assumed the proportion of mere specks, and ultimately they disappeared altogether. It was the first time I saw such a large bird fly up out of sight; of course if it was a small species I could readily understand it being lost to one's vision. It was a surprise to us the way those Darters vanished. Taken by W. McEnerny, Frank and Sid. W. Jackson. An average specimen of this set measures in inches = 2·47 × 1·47.

L. Vesper up at the nest of the Snake-necked Darter.
Loc., Lavadia, Clarence River.
(*See data No. 310.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

Drawer I.

312 745 4

CAPE BARREN GOOSE,

Cereopsis novæ hollandiæ, Latham.

Splendid clutch of four eggs, taken on Clarke Island, Bass Straits, by J. W. McLaine, on the 16th of September, 1901. An average specimen of this set measures in inches = 3·33 × 2·19. A smaller specimen in the set measures = 3·18 × 2·12.

313 742 3

PIED GOOSE,

Anseranas semipalmata, Latham.

Three eggs taken from a nest at the Lake, near Lavadia, Clarence River, N.S.W., on the 20th of September, 1898, by J. McEnerny and Sid. W. Jackson. Nest was constructed of flat reeds, and placed in a thick mass of rushes in the middle of the swamp. An average specimen of this set measures = 3·11 × 2·27.

314 761 2

MUSK DUCK,

Biziura lobata, Shaw.

Set of 2 eggs, taken on Caramana Swamp, near Grafton, Clarence River, N.S.W., on the 8th October, 1892, by T. Lane and Sid W. Jackson. The nest was built of flag-like Rushes (*Typha angustifolia*), and placed near a small island in the swamp, and only a few yards away from a nest and eggs of the Sombre Gallinule, or Black Moor Hen. The water was deep where the nest was situated, and my light swamp canoe, the "*Podiceps*," was once again brought into valuable service. Specimen A. measures = 3·28 × 2·10. Specimen B. measures = 3·17 × 2·07.

315 750 2

MOUNTAIN DUCK,

Casarca tadornoides, Jardine.

This fine pair of eggs was taken by J. Denny, on the 16th August, 1895, at Narung, Lake Albert, South Australia. The nest was placed in a Grass Tree (*Xanthorrhœa sp.*), and was composed of leaves, and lined with down. Specimen A. measures in inches = 2·97 × 1·93. Specimen B. measures in inches = 2·92 × 1·97.

316 751 7

BLACK DUCK,

Anas superciliosa, Gmelin.

Set of 7 eggs, taken from a nest built in Blady grass (*Imperata arundinacea*), on a gum tree ridge near the Armidale Road, and four miles from South Grafton, N.S.W. The nest was lined with down, and the remarkable thing about this clutch is that they were found nearly two miles from any water. If my eyes had not rested on these eggs, and the young birds had hatched out, what would they do in such an arid locality? Surely they could not survive on a gravel ridge. Taken by W. McEnerny, J. McEnerny, Frank and Sid. W. Jackson, on 9th October, 1893. An average specimen of the clutch measures in inches = 2·27 × 1·64.

317 746 4

WOOD DUCK,

Chenonetta jubata, Latham.

Four eggs, taken from a hollow in a Swamp Mahogany (*Eucalyptus robusta*), by J. Orr and Sid. W. Jackson, on the 10th of October, 1892, near the Lake, South Grafton, Clarence River, N.S.W. These handsome birds are very plentiful some seasons in the latter district, yet we have always found it very difficult to drop across the nests. An egg of this set measures = 2·25 × 1·57.

318 756 8

SHOVELLER DUCK,

Spatula rhynchotis, Latham.

Set of 8 eggs, taken by Sid. W. Jackson 100 yards from the edge of Sportsman Swamp, South Grafton, N.S.W., on the 25th of September, 1898. The nest was built in dead Blady grass (*Imperata*

Data No.	No. in A. J. Campbell's Book.	No of Eggs.	
			arundinacea), and lined with down. I found another nest on same date containing eleven eggs, but which a bush fire had unfortunately passed over, and half roasted, and so were rendered useless as specimens. An egg in the clutch under notice measures in inches = 2·15 × 1·49. Beautiful clutch.
319	758	1	FRECKLED DUCK, *Stictonetta nævosa*, Gould. This rare egg, which was addled, I took from a nest containing 7 young birds. The nest was built in a clump of *Sida retusa*, near a swamp at Caramana, near Grafton, N.S.W. This is only the second egg of this species that I have been fortunate enough to find. Taken by Sid. W. Jackson and an aboriginal named Nymboi Jack, on the 11th of November, 1892. It measures in inches = 2·40 × 1·77.
320	759	1	WHITE-EYED DUCK, *Nyroca australis*, Gould. This rare egg was taken from a nest, from which the bird was shot as it left it. We saw the bird fly away suddenly from a clump of Burney Weed or Smart Grass (*Polygonum lapathifolium*), but never for the moment dreamt that it had a nest, as we had so frequently been disappointed on former occasions in rushing to places from which this species flew, and so much so that we naturally concluded they did not breed in the district. But imagine our surprise to find that it had actually flown from its nest, when W. McEnerny pointed the gun and fired. Taken on the 2nd of September, 1893, by W. and J. McEnerny and Sid. W. Jackson, at Sportsman Swamp, South Grafton, N.S.W. Only one egg, which measures = 2·27 × 1·63.
321	744	2	WHITE-QUILLED GOOSE TEAL, *Nettopus albipennis*, Gould. This pair of rare eggs was taken from the hollow spout of a tree, standing in a swamp in the Nicholson River district of North-west Queensland, by C. Woodlands, on the 25th of March, 1898. He has enriched this collection with many rare eggs from the Gulf of Carpentaria, but I consider this one of the most welcome acquisitions, though one of *simplex munditiis*. We frequently observed these beautiful birds in the Clarence District of New South Wales, but were never fortunate in finding a nest. We often visited the old dead Eucalyptus tree standing near the homestead of the late Jas. F. Wilcox, at "Dallinga," South Grafton, and in a spout of this tree eight young birds were reared some 25 years ago, 1882, but our visits were always for nothing, not even a sight of any of the birds being obtained. I possess a fine pair of these birds (♂ and ♀), which were shot on a Clarence River swamp during 1895. Specimen A. measures in inches = 2·16 × 1·52. Specimen B. measures = 2·15 × 1·57.
322	753	9	GREY TEAL, *Nettion gibberifrons*, Müller. Perfect clutch of 9 eggs, taken from the edge of Duck Swamp, South Graton, N.S.W., on the 15th September, 1898, by W. McEnerny, J. McEnerny, Frank and Sid. W. Jackson. The nest was lined with down, and placed in long Smart Grass (*Polygonum lapthifolium*), not far from the water. The eggs of this set have a pale greenish tinge. We found a nest of this species placed in a hollow limb only on one occasion. An average specimen of this set measures = 2·07 × 1·40.
323	752	9	TEAL, *Nettion castaneum*, Eyton. Set of 9 eggs, taken on the 10th of November, 1896, at the back of the swamp known as Duck Swamp, which, after heavy rains, is a very extensive sheet of water, and is situated near South Grafton, in the Clarence River district. The nest was placed in the hollow of a burnt out stump, near Layton's farm, and the eggs were quite hidden in the mass of down. These eggs are of the usual creamy colour, and an average specimen of the set measures in inches = 1·96 × 1·45. Taken by Sid. W. Jackson. They were somewhat incubated.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
324	747	5	WHISTLING DUCK, *Dendrocycna arcuata*, Cuvier.

Five eggs, rare, taken from a nest built in a field of ripe oats, at Caramana, Clarence River, N.S.W., on the 9th of November, 1893 (not 1894 as I erroneously stated in A. J. Campbell's book on page 1026). The nest contained 10 eggs, and I very foolishly broke the set in order to try and accommodate and help another friend collector. I am sorry to a certain degree about it now, because we have taken no others since. The nest was constructed of a layer of dead grass and straw, upon which were placed a few dozen leaves of the Spotted Eucalypt (*Eucalyptus maculata*), and was devoid of any down or feathers. Both birds (♂ and ♀) were shot at the nest, and proved to be the "Whistler." The eggs are of a cream colour, and have a very thin coating of lime, and are thickly marked with rich yellowish smears, and two of them have a rich purplish-brown spot, which seems remarkable for a duck's egg to possess. The late George Barnard, of Coomooboolaroo, near Rockhampton, Queensland, took a set of these eggs on the 25th of May, 1890, and several of which possessed these same strange purplish markings. Taken by Frank and Sid. W. Jackson. An average specimen of the 5 eggs measures in inches = 2·07 × 1·57.

325	748	2	PLUMED WHISTLER, *Dendrocycna eytoni*, Gould.

This pair of eggs was taken from a nest built in grass near a swamp, in the Nicholson River district, North-west Queensland, by C. Woodlands, on the 16th of March, 1898. They are smaller and much more rounded than those of *D. arcuata*, Cuvier, and are also much glossier than those of the former species and the surface more granulated, but microscopically so. Specimen A. measures = 1·93 × 1·52. Specimen B. measures = 1·88 × 1·51.

326	757	5	PINK-EARED DUCK, *Malacorhynchus membranaceus*, Latham.

This set of 5 rare eggs was taken from a nest, built in a tall hollow stump, on the edge of Alipou Swamp, South Grafton, N.S.W., on the 13th of September, 1896, by Frank and Sid. W. Jackson. The nest was lined with feathers and down, which were simply trampled into the hollow at the top of the stump. The eggs were heavily incubated, and were difficult to blow; however, patience and perseverance has given 5 neatly blown specimens to the collection. The shell of these eggs is the hardest I have ever attempted to bore, and the best drill I had soon told a tale after operating on four of them. S. Robinson informs me that he has found them difficult to treat with, owing to the solidity of the shell, and has taken some of them in South-west Queensland. The eggs are of a rich light cream colour, and rather glossy, and have a fine texture of shell, and when rolled together produce a peculiar grating noise. Under the lens, however, I find the shell is not pitted, and like most of the eggs of the *Anatidæ* family, are minutely granulated, each tiny excrescence being smooth on top, and the construction of the shell resembles very much that of the Jabiru (*Xenorhynchus asiaticus*), Latham. This set of 5 are the only eggs I have seen of this bird. Nest was placed 16 feet above the ground. An average specimen measures in inches = 1·82 × 1·35.

Drawer J. (Bottom Drawer on left side of Cabinet.)

327	691	1	WANDERING ALBATROSS, *Diomedea exulans*, Linnæus.

Clutch of one egg, which is the usual complement for a sitting. It was taken on Campbell Island, South Pacific Ocean, on the 9th of January, 1897, by the captain of a whaling vessel, during a cruise in those parts. Campbell Island is in the South Pacific, south-east of New Zealand, to which it belongs.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			It is mountainous and well wooded, has good harbours, and is occasionally visited by whaling and other vessels. The wings of this gigantic bird, when fully extended, sometimes measure nine and a half feet from tip to tip, or two feet longer than a large Wedge-tailed Eagle. This egg is a perfect specimen, and measures in inches = 5·29 × 3·13.
328	692	1	SHORT-TAILED ALBATROSS, *Diomedea albatrus*, Pallas. One egg, a clutch, taken on Bonin Islands (situated in latitude 27° 40′ N., and long. 142° 10′ E.) during November of 1896. Bonin (or Archbishop) Islands belong to Japan, and lie to the south of it. Peel Island is the largest of the group, and is frequently visited by vessels engaged in whale fishing. I received this rare egg through the courtesy of Dr. Charles Ryan, of Melbourne. Many seabirds deposit only one egg for a sitting. It measures in inches = 4·15 × 2·77.
329	694	1	WHITE-CAPPED ALBATROSS, *Thalassogeron cautus*, Gould. One egg, a clutch, taken by D. Le Souëf, on Albatross Island, Bass Straits, on the 26th of November, 1894. This specimen measures in inches = 3·85 × 2·62.
330	693	1	BLACK-BROWED ALBATROSS, *Diomedea melanophrys*, Temminck. One egg, a clutch, taken on Campbell Island, South-east of New Zealand, during January of 1897. This bird is well-known to all sea-faring men as the "Molly Hawk." I have frequently seen them on the coast of New South Wales, and during my last trip north several of these birds flew about the steamer for some hours. Occasionally they are seen in Sydney Harbour. This egg measures = 4·23 × 2·63.
331	—	1	KING PENGUIN. *Aptenodytes patagonica*, Gray. (Not in A. J. Campbell's book.) One egg, clutch, taken on Macquarie Island, south of New Zealand, by Captain Waller, of the S.S. Victoria, during November, 1900. This splendid egg measures in inches = 3·69 × 2·67, and is very pointed at the smaller end.
332	—	1	ROYAL PENGUIN, *Eudyptes schlegeli*, Finsch. (Not in A. J. Campbell's book.) One egg, clutch, taken on Macquarrie Island, south of New Zealand, by a collector engaged by D. Le Souëf, on the 20th of October, 1897. This egg measures = 3·07 × 2·27, and is not so pyriform as the previous specimen.
333	738	2	CRESTED PENGUIN, *Catarrhactes chrysocome*, Forster. Clutch of 2 eggs, taken on Macquarie Island, south of New Zealand, by Captain Waller of the S.S. Victoria, during the month of November, 1900. These eggs are round, while those of all the other Penguins are usually pointed at one end, and somewhat pyriform. Specimen A. measures in inches = 2·60 × 2·21. Specimen B. measures = 2·59 × 2·23. These birds are better known as "Rock Hoppers."
334	739	2	LITTLE PENGUIN, *Eudyptula minor*, Forster. Set of 2 eggs, taken by A. Zietz on Kangaroo Island, South Australia, on 6th October, 1884. One egg (Specimen A.) is much smaller and more rounded than the other, and measures in inches = 1·93 × 1·57. Specimen B. = 2·12 × 1·63.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
335	740	2

FAIRY PENGUIN,

Eudyptula undina, Gould.

Clutch of 2 eggs, taken on Albatross Island, Bass Straits, on the 19th of November, 1890. These eggs are very pointed specimens as compared with those of the last two species. Specimen A. measures in inches = 2·23 × 1·57. Specimen B. measures = 2·40 × 1·60.

336	734	2

PELICAN,

Pelecanus conspicillatus, Temminck.

Splendid clutch of 2 of these rare eggs, taken by J. W. Mellor on an island in the Coorong, South Australia, on the 1st of October, 1894. Writing to me he states :—"I had a great difficulty in getting off to this island, owing to there being no person living near the place for miles, and consequently no boat was procurable. I had to get a black, and cart a small skiff about eight miles to the nearest point on the mainland shore, and when this was accomplished there was much danger on account of the rough squalls encountered there. Everything had to be done with dispatch, and we carried our lives in our hands, with no thought of what might happen should we do this or that. But, however, we got on land again just in time to escape the squall that came up. This clutch is from the nest marked on the spot." Both eggs are thickly coated with the natural lime, similar to that found on the eggs of the Cormorants and Gannets, etc. I have frequently seen flocks of the birds, but have never been fortunate enough to discover a nest. They appear difficult to find, but once a colony of them is located during breeding season, many eggs can then be procured, but they generally build in such remote and out of the way places that a person has little or no chance of dropping across them. This set was very heavily incubated. Specimen A. measures in inches = 3·60 × 2·22. Specimen B. measures = 3·52 × 2·24.

337	683	1

GIANT PETREL,

Ossifraga gigantea, Gmelin.

Clutch of one rare egg, taken on Macquarie Island, south of New Zealand, by Captain Waller, of the S.S. Victoria, during November, 1900. The shell is very coarse and granulated, in fact I think, with the exception of the eggs of the Cassowary and Emu, it is the roughest of any Australian species. It looks as if it had been made of sand, and solidified in a mould. Macquarie Island, where the egg came from, is situated about 650 miles south-west by south from New Zealand, and is the home of many sea birds, including the larger Penguins. This fine specimen measures in inches = 4·21 × 2·57.

338	669	1

SHORT-TAILED PETREL,

Puffinus tenuirostris, Temminck.

Clutch of one egg, taken by Alex. Borthwick on Phillip Island, Western Port, Victoria, on the 26th of November, 1884. (See A. J. Campbell's book, page 888.) This bird is familiarly known to most people as the "Mutton Bird." Thousands of the eggs have been frequently collected and sent to Victoria, and sold in the Melbourne markets for cooking purposes. They are a little larger than those laid by the ordinary domestic fowl, but bear a close resemblance. Notwithstanding the great number of eggs and birds annually taken for food, there seems to be no diminution in their numbers, and they resort to the same place to breed year after year. Matthew Flinders, the illustrious navigator, saw a great flock of these birds during his exploration of Bass Strait in 1798. There was a stream of them of from 50 to 80 yards in depth, and 300 yards or more in breadth. The birds were not scattered, but were flying as compactly as free movement of the wings seemed to allow, and during a full hour and a half they continued to pass, without interruption, at a rate little inferior to the swiftness of a pigeon. On the lowest computation the number could not have been less than 100,000,000. Taking the stream of birds to have been 50 yards deep, by 300 yards in width, and that it moved at the rate of 30 miles an hour, and allowing 9 cubic yards of space to each bird, the numbers would amount to 151,500,000, or thereabouts. The burrows required to lodge this number of birds would be 75,750,000, and, allowing a square yard to each nest or burrow, they would cover something more than 18½ geographical

Data N°	No. in A. J. Campbell's Book.	No. of Eggs.	
			square miles of ground. The birds deposit only one egg in each burrow for a sitting, and after carefully working it out, I find that the total weight of the eggs for the above flock of birds would be over 6,341 tons. The specimen under notice measures in inches = 2·87 × 1·88.
339	666	1	WEDGE-TAILED PETREL, *Puffinus chlororhynchus*, Lesson. Taken on Julian Rock, Byron Bay, N.S.W., by W. McEnerny and Sid. W. Jackson, on the 18th of November, 1899. One egg formed the full sitting in every instance. The eggs varied in size and shape, but most of them were very pointed at one end. They are snow white when first laid, but soon become dirty and nest stained after being in the nest a few days. This specimen measures in inches = 2·51 × 1·63.
33	666	1	Ditto, data ditto. The egg measures = 2·40 × 1·58.
341	666	1	One egg, taken by A. J. Campbell, on the 13th December, 1889, on Rat Island, Houtman's Abrolhos, Western Australia. (See his book, page 877.) This egg from the *west* measures = 2·47 × 1·53.
342	666	1	Clutch of one egg, collected for A. F. Basset Hull, on Broughton Island, north of Newcastle, New South Wales, on the 2nd of December, 1906. This egg is *pure white*, and was taken from the nest very soon after being laid. It measures in inches = 2·43 × 1·58.
343	690	2	DIVING PETREL, *Pelecanoides urinatrix*, Gmelin. Clutch of 2 eggs, one egg nearly in every case forms the sitting, two rarely ever being found. This set was taken by J. Burton, on Macquarie Island, south of New Zealand, on the 1st of November, 1896. The eggs are rather round, and measure as follows:—Specimen A. = 1·44 × 1·18. Specimen B. = 1·43 × 1·17.
344	689	1	FAIRY DOVE PETREL, *Prion ariel*, Gould. Clutch of one, taken by A. J. Campbell on North East Island, of the Kent Group in Bass Straits, on the 24th of November, 1890. This egg measures in inches = 1·64 × 1·23. (See A. J. Campbell's book, page 918.)
345	687	1	BANKS'S DOVE PETREL, *Prion banksi*, Gould. Clutch of one, taken by J. Burton on Macquarie Island, south of New Zealand, on the 21st of November, 1896. (See A. J. Campbell's book, page 916.) This egg is much nest-stained, still I prefer to leave it in this condition. It measures in inches = 1·93 × 1·42.
346	663	2	WHITE-FACED STORM PETREL, *Pelagodroma marina*, Latham. Clutch of 2 eggs, taken by Jas. A. Kershaw on Mud Island, Port Phillip Bay, Victoria, on the 10th of November, 1880. Specimen A. measures in inches = 1·43 × 1·06. Specimen B. measures = 1·43 × 1·05.
347	662	1	GREY-BACKED STORM PETREL, *Garrodia nereis*, Gould. This rare egg (a clutch) was taken with others by J. P. Seymour, at Tomahawk Island, Otago Peninsula, New Zealand, on the 20th of November, 1886. This specimen measures in inches = 1·33 × 1·02.
348	688	1	DOVE PETREL, *Prion desolatus*, Gmelin. Clutch of 1 egg, taken during the expedition of the Field's Naturalists' Club of Victoria to the Kent Group, Bass Straits, on the 23rd of November, 1890. Taken by Jas. A. Kershaw. Egg was very heavily incubated; it measures in inches = 1·78 × 1·35.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
349	688	1	Same data as No. 348. Measures = 1·69 × 1·30.
350	688	1	Ditto ditto. Measures = 1·77 × 1·32.

351 686 1

BROAD-BILLED DOVE PETREL,

Prion vittatus, Gmelin.

Clutch of one egg, which was taken on Macquarie Island, south of New Zealand, during January of 1897. Many nests were found containing young birds, but very few eggs were obtained. This is the only egg I have handled of this splendid species during my years of collecting. I received it through the courtesy of the late Sir Walter Buller, K.C.M.G., of New Zealand. This rare specimen measures in inches = 1·85 × 1·37.

352 657 2

PACIFIC GULL,

Gabianus pacificus, Latham.

Handsome clutch of 2 eggs, taken at the Bay of Shoals, Kangaroo Island, South Australia, by the late well known naturalist Samuel White, on the 12th of October, 1875. In his notes he says—"The eggs were always two in number, and placed on a little seaweed." Specimen A. measures = 3·11 × 2·05. Specimen B. measures = 2·80 × 2·09.

353 — 2

BLACK-BACKED GULL,

Larus dominicanus, Licht.

(This is not recorded in A. J. Campbell's book, as it is not considered a true Australian species.)

Beautiful clutch of 2 eggs, taken by Robert Hall, F.L.S., on Kerguelen Island in the South Seas, on the 16th of December, 1898. They are just as they were picked up from the nest, and have the flat paper-like seaweed (*Algæ*) adhering to them. They resemble very much the eggs of the Pacific Gull. Kerguelen Island lies in the Indian Ocean, about midway between the Cape of Good Hope and Australia, and was discovered by the French navigator, Kerguelen, in 1772. The island was visited by Captain Cook in 1777. Many birds breed on the island. Specimen A. measures in inches = 2·93 × 1·98. Specimen B. measures = 2·90 × 2·01.

354 658 1

GREAT SKUA GULL,

Megalestris antarctica, Lesson.

This rare egg was taken in Europe in June of 1892, by J. J. White. It measures = 2·90 × 2·01. This bird breeds on Macquarie Island, south of New Zealand, and it makes one wish that this find had been made nearer its home and breeding ground.

355 — 2

GOULD'S SILVER GULL,

Larus gouldi, Bonaparte.

(No. 598 in Gould's Handbook to the Birds of Australia.)

Set of 2 eggs, taken on Sweers Island, in the Gulf of Carpentaria, Queensland, by E. Drew, on the 16th of October, 1897. These eggs are of a deep stone ground colour, and more rounded than those found south. The late J. Gould designated this northern form as different to the Silver Gull of the south, and I have thus considered it advisable to place this northern clutch (very dark) under his *Larus gouldi*. One egg is larger and darker than the other. Specimen A. measures in inches = 2·15 × 1·57. Specimen B. measures = 2·01 × 1·51.

356 656 3

SILVER GULL,

Larus novæ-hollandiæ, Stephens.

This beautiful clutch of 3 eggs was taken on Cat Island, Bass Straits by D. Le Souëf, on the 10th of November, 1895. These eggs are larger and more pointed than those of the previous set, and the ground colouring is of a pale greyish-green. They measure as follows:—Specimen A. = 2·23 × 1·50. Specimen B. = 2·18 × 1·53. Specimen C. = 2·19 × 1·56.

Drw.	No. in A. J.	No.
357	732	1

RED-TAILED TROPIC BIRD,
Phaëthon rubricauda, Boddaert.

Clutch of 1 beautiful egg, taken on Lord Howe Island on the 17th of November, 1887, by the captain of a visiting steamer. Unfortunately the data giving the captain's name, and that of the boat, was mislaid by the party from whom I received the egg. It measures in inches = 2·74 × 1·92.

358	598	2

PIED OYSTER CATCHER,
Hæmatopus longirostris, Vieillot.

Clutch of 2 eggs, beautifully marked, taken by J. W. McLaine on King Island, Bass Straits, on the 19th of October, 1902. Specimen A. measures = 2·41 × 1·73. Specimen B. measures = 2·40 × 1·70.

359	599	2

BLACK OYSTER CATCHER,
Hæmatopus unicolor, Wagler.

Well marked clutch of 2 eggs, taken on King Island, Bass Straits, by J. W. McLaine, on the 16th of October, 1902. I found two sets of eggs of this species on the sea shore, south of the Clarence River, N.S.W., during December, 1894. Specimen A. measures = 2·37 × 1·59. Specimen B. = 2·37 × 1·61.

360	731	1

LESSER FRIGATE BIRD,
Fregata ariel, Gould.

A clutch of 1 egg, taken by J. T. Fox, on Malden Island, North Pacific Ocean, on the 24th of April, 1887. This island is situated in latitude 3° south, longitude 155° west, and is of coral formation and belongs to Britain. J. T. Fox, while on Malden in 1887 supervising the shipment of the rich deposits of phosphoric guano from this island, had many opportunities of studying this bird and its habits, and frequently noticed that if the bird was suddenly disturbed it would lift the egg in its claws and ascend into the air with it. This is the only bird, as far as I am aware, that possesses this extraordinary habit. This egg measures = 2·34 × 1·68.

Drawer K. (Top Drawer on right side of Cabinet.)

361	227	3

FIELD WREN,
Calamanthus campestris, Gould.

Perfect clutch of 3 eggs, taken near Adelaide, South Australia, on the 16th of September, 1897, by F. Richards. Specimen A. measures in inches = 0·82 × 0·64.

362	226	3

STRIATED FIELD WREN,
Calamanthus fuliginosus, V. and H.

Clutch of 3 eggs, taken by M. W. Harrison, at Risdon, near Hobart, Tasmania, on the 25th of August, 1900. An egg of this set measures in inches = 0·90 × 0·65.

363	224	3

BLACK-BREASTED SONG LARK,
Cinclorhamphus cruralis, V. and H.

Clutch of 3 eggs, taken at Myrniong, Victoria, by H. Lidgett, on the 14th of July, 1896. An egg of this set measures in inches = 0·91 × 0·63.

364	—	3

SONG LARK,
Cinclorhamphus cantillans, Gould.
(A. J. Campbell places this and the latter as the one species.)

Clutch of 3 eggs, taken by J. W. Mellor in a plantation of trees at "Holmfirth," Fulham, South Australia, on the 27th of November, 1894. The nest was composed of fine roots and fibre, placed in

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			a slight depression in the ground, with grass growing all around it. It was found by seeing the bird flying out of the same place several times, and, by carefully searching, at last dropped on the exact spot where the nest was situated. The eggs were rather heavily incubated, and are more rounded and heavily blotched than those of No. 363. Specimen A. measures = 0·83 × 0·68.
365	225	3	RUFOUS SONG LARK, *Cinclorhamphus rufescens*, V. and H. Beautiful clutch of 3 eggs, taken by Sid. W. Jackson, at Hawthorneville, South Grafton, N.S.W., on the 12th of December, 1897. Nest was placed in long grass, and I flushed the bird from it as I walked about looking for other nests. I found these birds plentiful on the grassy lands of the Darling Downs, in Southern Queensland. An egg of this set measures in inches = 0·83 × 0·64.
366	412	3	BUSH LARK, *Mirafra horsfieldi*, Gould. Clutch of 3 eggs, taken near Blicks River, Tyringham, 55 miles south-west of Grafton, N.S.W., by Sid. W. Jackson, on the 23rd of October, 1898. Two eggs are rather elongated, and Specimen A. of the clutch measures in inches = 0·88 × 0·61. We have taken several clutches of these eggs in the latter locality, near the river.
367	382	3	GROUND LARK, *Anthus australis*, V. and H. Set of 3 eggs, taken on the 31st of July, 1894, by Sid. W. Jackson, at South Grafton, N.S.W. These are generally the first eggs that find their way into a glass case, and form the nucleus of a collection. An egg of this set measures in inches = 0·87 × 0·61.
368	176	2	STRIATED GRASS WREN, *Amytis striata*, Gould. Clutch of 2 eggs, taken by a collector engaged by T. A. Brittlebank, near the Fitzroy River, North-west Australia, on the 23rd of September, 1899. Specimen A. measures = 0·78 × 0·62. Specimen B. measures = 0·79 × 0·57.
369	175	2	GRASS WREN, *Amytis textilis*, Quoy and Gaimard. Set of 2 eggs, taken by C. E. Cowle at Illumurta, Central Australia, on the 17th of March, 1899. The eggs of this bird are very rare, and are represented in few collections. Specimen A. measures in inches = 0·82 × 0.58. Specimen B. measures = 0·82 × 0·60.
37	220	4	LITTLE FIELD WREN, *Chthonicola sagittata*, Latham. Magnificent clutch of 4 eggs, taken in a grass paddock at Flemington, Sydney, on the 24th of November, 1906, by H. Keane. This set is of a beautiful dull cochineal red, and resembles polished marbles of that colour. The eggs of this bird are represented in most collections, and are the admiration of every oologist, yet I was fortunate in finding them only on one occasion. The birds are very plentiful in some localities near Sydney. An average specimen of this clutch measures in inches = 0·77 × 0·61.
371	222	2	BROWN SCRUB WREN, *Sericornis humilis*, Gould. Clutch of 2 eggs, and one egg of Fan-tailed Cuckoo, taken at Glenorchy, Tasmania, by W. Morris on the 30th of October, 1904. This is a very dark set of Scrub Wren's eggs, and resembles small specimens of those of the Yellow-throated Scrub Wren, of New South Wales. Specimen A. measures = 0·95 × 0·68. Specimen B. measures = 0·93 × 0 68.
	451	1	FAN-TAILED CUCKOO, *Cacomantis flabelliformis*, Latham. Taken with the set of 2 Brown Scrub Wren's eggs. This Specimen measures = 0·79 × 0·60.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
372	202	2

BROWN SCRUB WREN,

Sericornis humilis, Gould.

Beautiful clutch of 2 eggs, which are of much lighter variety in the ground colouring than in those of the previous set. Taken by Godfrey Chrisp, in the scrubs at Ringarooma, Tasmania, on the 11th of October, 1899. An egg of this clutch measures in inches = 0·92 × 0·66.

NEST OF THE ORANGE-WINGED TREE RUNNER.
Loc., South Grafton, Clarence River.
(*See data No. 380, page 66.*)
(Natural size.)

373 197 3

WHITE-BROWED SCRUB WREN,

Sericornis frontalis, V. and H.

Clutch of 3, taken by W. McEnerny and Sid. W. Jackson, at Booyong, near Lismore, N.S.W., on the 30th of November, 1899. The nest was built in dead grass and ferns on the bank of Unio Creek, in Booyong Scrubs. We took six sets of these eggs during our long stay in the scrubs of the Richmond River district. Specimen A. of this clutch measures in inches = 0·82 × 0·63.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
374	201	2	SPOTTED-THROATED SCRUB WREN, *Sericornis osculans*, Gould. (In Drawer C., pages 21 and 22, will be found a splendid series of eggs of the Yellow-throated Scrub Wren.) Set of 2 eggs, taken from a nest in a scrub near Murtoa, on the 2nd of October, 1899. Taken by John Laird. Specimen A. measures in inches = 0·82 × 0·58. Specimen B. measures = 0·82 × 0·59.
375	198	3	LARGE-BILLED SCRUB WREN, *Sericornis magnirostris*, Gould. The eggs of this species are subject to great variation, both in the ground colour and general markings. This clutch is of the normal form, and is of a purplish buff. Taken in the scrubs at Booyong, near Lismore, N.S.W., on the 28th of October, 1899, by Sid. W. Jackson. The eggs are lightly zoned at the larger ends. One egg of the clutch measures in inches = 0·80 × 0·54.
376	198	2	Pair of eggs, taken at Booyong Scrubs, Richmond River district, N.S.W., on the 21st October, 1899, by Sid. W. Jackson. Specimen A. is a *dark* egg of the normal variety, and measures = 0·77 × 0·60. Specimen B. is of a light buffy-white ground, and quite unlike Specimen A., and measures = 0·76 × 0·57. This is an instance of two varieties being found in the one nest.
377	198	3	This is a magnificent clutch of 3 eggs, and the ground colour is of a pale buffy-white, and each specimen has a large distinct zone or ring of dark purplish-brown at the rounded or larger end. They are real exceptions to the rule, and other Australian collectors who have examined them inform me that they have not seen a set similarly marked, and the clutch has been inspected by many, including Dudley Le Souëf and A. J. Campbell of Melbourne. They are rather swollen ovals in shape, and were taken by A. Boon and Sid. W. Jackson in Vinegar Hill Scrub, near Tyringham, south-west of Grafton, N.S.W., on the 23rd of October, 1898. An egg of this set measures in inches = 0·75 × 0·58.
378	198	3	This is another remarkable set, the ground colour being white, covered with delicate cobweb-like streaks, such as we find on the eggs of the Babbler (*Pomatorhinus temporalis*), but of course not nearly so well marked; they are also faintly zoned with light brown. The following egg of the Fan-tailed Cuckoo was found in the nest with these three eggs. They were taken at Geo. Dietz's cedar scrub, Don Dorrigo, New South Wales, by Frank and Sid. W. Jackson, on the 12th of October, 1898. An egg of the clutch measures = 0·77 × 0·56.
	451	1	FAN-TAILED CUCKOO, *Cacomantis flabelliformis*, Latham. One egg, data same as latter set, and taken with the above 3 eggs. This Cuckoo chiefly confines itself to the scrubs.
379	198	4	LARGE-BILLED SCRUB WREN, *Sericornis magnirostris*, Gould. This is an albino clutch, comprising the unusual complement of 5 eggs, one of which unfortunately got broken. This is the only pure white set of this species that I have ever taken. It is an established fact that most birds which deposit their eggs in dark places (as this and other members of the *Sericornis* family do), usually lay white eggs, such as Parrots, Rock Warblers, Pardalotes, Bee Eaters, Kingfishers, etc., but the *Sericornis* is one of the exceptions to the rule, and to find that the birds sometimes lay snow white eggs in their dark dome-shaped pensile nests, instead of the dark chocolate-coloured form, goes to prove that nature is trying to correct matters, and that *white* is more suited under the circumstances. These birds frequently lay in the nests of the Yellow-throated Scrub Wren, but we have found them building their own nests in the Richmond and Clarence River districts of N.S.W. Further south, in the Bellinger River scrubs, and in those at Ourimbah, near Gosford, N.S.W., I have found the eggs deposited in nests of the Yellow-throated species. This set of 4 was taken by P. Boon, A. Boon, and Sid. W. Jackson, in a scrub near Cloud's Creek, south-west of Grafton, N.S.W., on the 24th of October, 1898. Albino clutches of the eggs of this bird have been taken at Ourimbah by J. Ramsay

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

and others, so this shows that the clutch which I took was by no means an exception to the rule, and that white eggs are frequently laid instead of the chocolate coloured type, which is considered the normal type. (See Rock Warbler, data No. 547.) An egg of this clutch measures in inches = 0·76 × 0·57.

380 277 4

ORANGE-WINGED TREE RUNNER.

Sittella chrysoptera, Latham.

Large set of 4 eggs, taken by W. McEnerny, Frank and Sid W. Jackson, six miles from South Grafton, Clarence River, N.S.W., on the 16th of September, 1894. The nest is a handsome structure, and was placed in the upright fork of an Iron-bark Eucalypt (*Eucalyptus siderophloia*), at an altitude of 60 feet. These birds possess true and wonderful instinct in making their nests accurately harmonize with the surroundings, and they are very difficult to detect. I have noticed that they build upon the dead upright forked limbs much more frequently than on those which are green. The decoration of these nests, which is often very beautiful, may be claimed as evidence of the existence of æsthetic sensibility amongst birds; but although my years of observation lead me to credit birds with a certain amount of reasoning power, I, like other naturalists and lovers of nature, am inclined to think that utility and protective mimicry are in the main responsible for all the wonderful skill and art displayed in their architecture, and it is this which makes ornithology such a delightful study. The two accompanying photographs (pages 64 and 66) show how neatly these little birds can cover or thatch the nest with small shingles of bark, which are perpendicularly fastened on with cobwebs and a glutinous secretion, making it closely resemble the branch upon which it has been built. During some seasons these birds are rather common inthe bush about Sydney. An egg of this clutch measures in inches = 0·67 × 0·53.

NEST OF THE WHITE-HEADED TREE RUNNER.
(Nearly natural size.)
Loc., Glen Ugie Peak, Clarence River, N.S.W.
(*See data No. 382, page 67.*)

381 [illegible] 3

BLACK-CAPPED TREE RUNNER,

Sittella pileata, Gould.

Set of 3 eggs, taken by J. A. Hill at Kewell, near Murtoa, Victoria, on the 27th of September, 1894. The markings on these specimens are larger than on those of the previous set. An egg of this clutch measures in inches = 0·68 × 0·53.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
382	278	3

WHITE-HEADED TREE RUNNER,

Sittella leucocephala, Gould.

Set of 3 eggs, taken at Glen Ugie Peak. This very rocky mountain, which is also known as Mt. Elaine, is of volcanic origin. It rises abruptly from comparatively level country, and has portions of its sides thickly clothed with luxuriant sub-tropical growth. At the foot there is a splendid forest of immense Iron-bark Eucalypts, and other useful timbers, and it was in this locality where we found several sets of rare eggs, a record of which will be found in the pages of this volume. The mountain is situated 14 miles south-east of Grafton, in the Clarence River district, N.S.W. This set was taken on the 14th of October, 1894, by W. McEnerny, J. McEnerny, Frank and Sid. W. Jackson. The nest, a photograph of which is shewn on page 66, was placed 53 feet from the ground on a dead upright forked limb of a Bloodwood Eucalypt (*Eucalyptus corymbosa*). I remember the first nest and eggs which I found of this species; it was during September of 1888, and was placed in a Eucalypt, or gum tree, near Gowrie Mountain, on Major H. V. King's estate, a large sheep station not far from Toowoomba, Queensland. During the latter part of August of the following season (1889), I found another of these interesting nests, which was built in a thick Eucalypt in the late Hon. James Taylor's bush paddock, on the Drayton Road, Toowoomba. In coming down the tree with my treasured specimens, my foot slipped out from one of the nitches, or steps, which I had cut into the tree with a tomahawk on my way up, and I fell to the ground, a distance of over 25 feet, and sustained a compound fracture of the right shoulder. This was the only accident we ever had during our many years of collecting, and it was quite sufficient. I still possess the nest from which the eggs were taken. An egg of this set measures = 0·61 × 0·49.

383	287	3

GREEN BACKED WHITE EYE,

Zosterops gouldi, Bonaparte.

Set of 3 eggs, taken near the Blackwood River, South-west Australia, by S. Hall, on the 10th of January, 1897. One egg of the clutch measures in inches = 0·65 × 0·48.

384	285	4

WHITE-EYE OR SILVER EYE,

Zosterops cærulescens, Latham.

Set of 4 eggs, taken by Sid. W. Jackson on Wilson's Hill, South Grafton, N.S.W., on the 22nd of September, 1893. These little birds are very destructive to fruit, and on Belltrees Station, near Scone, N.S.W., I noticed many of them on the grapes in the vineyard. With their sharp pointed bills they perforate the fruit, and it soon starts to ferment and die off. This is particularly noticeable in cases where rain has fallen shortly after a visitation of the birds. In the Clarence River district I found them very plentiful, in fact they are numerous all along the coasts of New South Wales and the other States, and each season they congregate and make periodical visits to the various orchards, etc. Their note, when at its best, is a very clear canary-like whistle, which is often kept up for several minutes. One egg of the clutch measures in inches = 0·68 × 0·47.

385	288	4

PALE-BELLIED WHITE EYE,

Zosterops albiventer, Reichenbach.

Set of 4 eggs, taken near Normanton, North Queensland, by E. Drew, on the 3rd of December, 1897. An egg of this clutch measures = 0·65 × 0·48.

386	236	3

BLACK-BANDED WHITE FACE.

Xerophila nigricincta, North.

This set of 3 rare eggs was taken by C. E. Cowle, at Illamurta, on the Finke River, Central Australia, on the 6th of April, 1898. The nest was built in a Mulga bush (*Acacia aneura*), and placed about 10 feet from the ground; the bird was hopping about whilst the eggs were being blown. One egg of the clutch measures in inches = 0·70 × 0·52.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
387	234	2

WHITE FACE.

Xerophila leucopsis, Gould.

Pair of eggs, taken by J. A. Hill, near Kewell, Victoria, on the 3rd of September, 1893. Specimen A. measures in inches = 0·74 × 0·55.

388	179	3

GRASS BIRD.

Megalurus gramineus, Gould.

Set of 3 eggs, taken by A. F. Bassett Hull and Sid. W. Jackson, at Dee Why swamp, north of Manly, near Sydney, on the 14th of November, 1904. The nest was placed in the rushes growing along the edge of the swamp, and was really built up over the water. An egg of the clutch measures = 0·66 × 0·52.

389	180	2

TAWNY GRASS BIRD.

Megalurus galactotes, Temminck.

Pair of eggs, taken from a nest built in grass and rushes on the edge of the creek in front of "Dallinga," South Grafton, N.S.W., on the 10th of November, 1893. Several clutches of these eggs were found in this locality, but in nearly every instance they were in a very advanced state of incubation, which rendered them impossible to blow. This pair was taken by Albert Amos, Frank and Sid. W. Jackson, and was our first find. The nest was composed of dead grass, and lined with feathers, and was a very frail structure, not nearly so compactly put together as is the case with that of *Megalurus gramineus*, and like that species this bird dwells in the reed and grass beds about swamps and creeks, and utters a very weak and plaintive little note. Specimen A. measures in inches = 0·68 × 0·53.

390	182	4

GRASS WARBLER.

Cisticola exilis, V. and H.

Beautiful set of 4 eggs, taken by A. F. Basset Hull and Sid. W. Jackson, at Dee Why, north of Manly, near Sydney, on the 21st of January, 1906. The nest was placed only six inches from the ground, being built near the edge of Dee Why swamp, and had 4 large green Dock leaves (*Rumex*) stitched around it, which rendered it completely hidden from view. It is just wonderful how these little birds sew the leaves together, edge to edge; and the strong cobweb, or byssine threads, are drawn so neatly, and the stitches kept such a uniform distance apart, that one would really think it had been accomplished by the hand of a seamstress. The nest is a dome-shaped structure neatly lined with white cobweb, etc, as well as the silken down or pappus from the Scotch Thistle (*Cardmis lanceolatus*), and the specimen shown in the accompanying photograph contained the set of eggs now under notice. On the front portion of this nest will be seen one of the leaves, which the birds have securely sewn on with fibre formed of strong cobweb, and around the *edge* of this leaf are 28 incisions, through which a silk-

NEST OF THE GRASS WARBLER.
(Natural Size.
Loc, Dee Why, near Manly, Sydney.
(*See data No. 390.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			like thread has been drawn; the other three leaves are not visible, as one covers the top of the nest, and the other two act as a protection for the back parts. When these leaves were fresh and green the nest looked really beautiful, and was very cleverly hidden from observation. On a hot day these birds leave the reed and grass beds for a time to flitter about high in the air, and during their papilionaceous flight they are continuously pouring forth their strange little notes; then suddenly they lower in a mysterious manner straight down to the ground, similar to the descent of the Sky Lark. The note of the Grass Warbler is a shrill frog-like squeak, followed by two or three chirps of a softer and different tone. The notes resemble—s-q-u-e-a-k churrup churrup, s-q-u-e-a-k churrup churrup churrup. The squeak is uttered very slowly, but the churrups following it are produced rapidly. An average specimen of this very pretty clutch of 4 eggs measures = 0·62 × 0·47.
391	182	4	Clutch of 4 eggs, taken by Sid. W. Jackson on the 7th of February, 1899, at South Grafton, N.S.W. The nest was built in a field of lucerne, and contained also an egg of the Narrow-billed Bronze Cuckoo. This clutch is of a beautiful bluish-green, with very large brown blotches, and not small dots as on those of the previous set taken near Manly, Sydney. One egg of the set under notice measures = 0·65 × 0·46.
	455	1	NARROW-BILLED BRONZE CUCKOO, *Chalcococcyx basalis*, Horsfield. One egg, taken with the latter set of 4 Grass Warblers' eggs. It measures in inches = 0·72 × 0·52.
392	182	4	GRASS WARBLER, *Cisticola exilis*, V. and H. Clutch of 4 eggs, taken at Pearce's Creek, Booyong, near Lismore, N.S.W., on the 19th of October, 1899. The nest was built in the top portions of the Blue Weed, or Wild Verbena (*Verbena bonariensis*), growing on S. Trimble's farm. It contained also an egg of the Bronze Cuckoo. One egg of the set measures = 0·62 × 0·47.
	457	1	BRONZE CUCKOO, *Chalcococcyx plagosus*, Latham. One egg taken with the set of 4 Grass Warblers' eggs. It measures in inches = 0·73 × 0·48.
393	367	2	MISTLETOE BIRD. *Dicæum hirundinaceum*, Shaw. Set of 2 eggs, taken in the bush near "Cranbrook," at Rose Bay, Sydney, on the 28th of September, 1901, by Sid. W. Jackson. The nest, which resembles a pouch, is of a soft felt-like consistency, and was built in a bush locally known as the Pigeon Berry (*Elæocarpus obovatus*). It was suspended on a twig 15 feet from the ground, and contained also an egg of the Narrow-billed Bronze Cuckoo. A photograph of the nest accompanies this description. During August and September of last year (1906) I found three partly built nests of the Mistletoe Bird at Roseville, near Sydney, and for some reason or other the birds had deserted each one when only half completed. This pretty swallow-like bird often feeds on the ripe mucus berries of the Mistletoe (*Loranthus celastroides*), etc., and is responsible to a great extent for the distribution of this growth, as, in order to free the seeds from its bill it flies to some rough-barked tree, where they are

NEST OF THE MISTLETOE BIRD,
(Natural size.)
Loc., Rose Bay, Sydney.
(See data No. 393.)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			liberated and fall into the crevices of the bark, soon taking root. I have seen the Spotted Eucalypti and other trees in the Clarence River district just one mass of this parasitical pest. Our orchards in Australia suffer from it if they are not properly looked after. Several different species of this Mistletoe have often come under my notice in the bush, and I have frequently found nests built in them. In *Loranthus celastroides* I found the nests of the Crow (*Corvus coronoides*), Sparrow Hawk (*Accipiter cirrhocephalus*), Red-browed Finch (*Ægintha temporalis*), etc., and likewise in *Loranthus pendulus*. Both these Mistletoes infest the various Eucalyptus trees. In *Loranthus linophyllus*, which grows on the
393			Forest Oak (*Casuarina torulosa*), I have often found the nests of the Satin Bower Bird (*Ptilonorhynchus violaceus*); and in *Loranthus alyxifolius*, which grows on the Booyong (*Tarrietia actinophylla*), and other trees in the rich scrubs of the Richmond River district, I have on two occasions found those of the Regent Bower Bird (*Sericulus melinus*). Another parasite which I found common about North Sydney is known as *Notothrix cucullata*, and frequently grows on *L. vaccinioides*, *celastroides*, or some other parasitical growth. Specimen A. of the set measures in inches = 0·67 × 0·48.
	455	1	NARROW-BILLED BRONZE CUCKOO, *Chalcococcyx basalis*, Horsfield. One egg, taken with the above two eggs of the Mistletoe Bird. It measures in inches = 0·67 × 0·47.
394	284	3	SUN BIRD, *Cinnyris frenata*, Muller. Set of 3 eggs, taken near Cairns, North Queensland, by a collector engaged by C. French, junr., on the 16th of November, 1896. They resemble tiny eggs of the Masked Wood Swallow (*Artamus personatus*.) An average specimen of the clutch measures in inches = 0·62 × 0·46.
395	230	3	WHITE-FRONTED BUSH CHAT, *Ephthianura albifrons*, J. and S. Clutch of 3 eggs, taken by A. F. Basset Hull and Sid. W. Jackson, at Freshwater, near Manly, Sydney, on the 13th of October, 1901. These birds are very plentiful around Sydney. An egg of the set measures = 0·74 × 0·53.
396	230	3	Clutch of 3 eggs, taken by Sid. W. Jackson, at Rose Bay, Sydney, on the 13th of September, 1902. The nest was built in a mass of ferns on damp ground. I saw numbers of these birds on Segenhoe Flats and Belltrees Station, near Scone, N.S.W., during the end of March this year, 1907, where they were feeding and flying about in the Roly-poly Weed, or Saltwort (*Salsola Kali*). An egg of the set measures = 0·71 × 0·52.
397	230	3	Clutch of 3 eggs, which are very long and pointed specimens, and were taken by M. W. Harrison, at Bridgewater, Tasmania, on the 8th of September, 1900. An egg of the set measures = 0·78 × 0·51.
398	231	3	TRI-COLOURED BUSH CHAT, *Ephthianura tricolor*, Gould. Set of 3 eggs, which are smaller and more rounded than those of the other three species. Taken by H. Scotney at Shamrock Wells, near Cunnamulla, Queensland, on the 24th of October, 1900. An egg of the clutch measures = 0·62 × 0·50.
399	232	3	ORANGE-FRONTED BUSH CHAT, *Ephthianura aurifrons*, Gould. Clutch of 3 eggs, taken by T. A. Brittlebank on the Upper Murray, Victoria, on the 26th of November, 1900. The eggs are pure white, and sparsely spotted. An egg of the clutch measures = 0·68 × 0·49.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
400	233	2	YELLOW-BREASTED BUSH CHAT, *Ephthianura crocea*, Castelnau and Ramsay. A pair of rare eggs, taken on the banks of the Nicholson River, North-west Queensland, by C. Woodlands, on the 27th of January, 1897. The nest was placed in rushes on the edge of a swamp, and contained 3 eggs, one of which was unfortunately broken during transit. Specimen A. measures in inches = 0·77 × 0.50.
401	126	3	SHORT-BILLED TREE TIT, *Smicrornis brevirostris*, Gould. Clutch of 3 eggs, taken at Mulwala, near Deniliquin, N.S.W., by J. C. Wyburd, on the 14th of September, 1899. Specimen A. measures in inches = 0·62 × 0·42.
402	127	1	YELLOW-TINTED TREE TIT, *Smicrornis flavescens*, Gould. One rare egg, taken from a nest near Burketown, North-west Queensland by E. Drew, on the 26th of October, 1893. The egg is smaller than those of the previous species, and measures in inches = 0·56 × 0·40.
403	379	4	BLACK AND WHITE SWALLOW, *Cheramœca leucosternum*, Gould. Splendid clutch of 4 eggs, taken by S. Robinson at Byrock, New South Wales, on the 24th of October, 1898. The nest was placed at the extremity of a tunnel which the birds had made in the bank of a creek. One egg is totally devoid of all markings. Specimen A. measures = 0·67 × 0·47.
404	380	3	TREE MARTIN, *Petrochelidon nigricans*, Vieillot. Clutch of 3 eggs, taken from a hollow spout of a Red or Flood Eucalypt (*Eucalyptus rostrata*) standing on the edge of Duck Swamp, South Grafton, Clarence River, N.S.W., on the 5th of September, 1897. The nest was placed 59 feet from the ground, and it was difficult to cut the eggs out from the limb without smashing them. Taken by Frank and Sid. W. Jackson. During the season these birds are very plentiful on Belltrees Station, near Scone, N.S.W. Specimen A. measures in inches = 0·72 × 0·51.
405	38[illegible]	5	Perfect set of 5 eggs, taken from the spout of a Flooded Gum (*Eucalyptus rostrata*), near the Race-course at South Grafton, N.S.W., on the 17th of August, 1898. The nest was placed just 49 feet from the ground. Taken by A. Amos, W. McEnerny, J. McEnerny, Frank and Sid. W. Jackson. An egg of the clutch measures = 0·70 × 0·50.
406	381	1	FAIRY MARTIN, *Petrochelidon ariel*, Gould. Set of 4 eggs, which are very elongated specimens, and was taken by Frank and Sid. W. Jackson on the 26th of October, 1895. The nest was built on the south bank of the Clarence River, near Grafton, N.S.W., being placed about ten feet above the water, while the grass hanging over the edge partly sheltered it. One egg of the set is completely devoid of all markings, while the remaining three are thickly spotted all over. We have found these bottle-shaped mud nests built in quite a variety of positions, under verandahs, in old tunnels, in school sheds, etc., and during a recent visit to Brisbane, Q., I saw many of the nests which had been built upon the wall of the Public Library there, and the little birds darted happily to and fro between the tall round pillars of masonry, just as if the great building had been erected for their own benefit. An average specimen of the clutch measures = 0·73 × 0·46.
407	378	3	WELCOME SWALLOW, *Hirundo neoxena*, Gould. Set of 3 eggs, taken from a nest which was built on the large girders under the Government Ferry Wharf at South Grafton, N.S.W., on the 17th of August, 1897. Taken by Sid. W. Jackson. During one afternoon in September of 1891 I counted over 50 of these nests on the girders of the above wharf. For several years at Grafton, in the Clarence River district, I noticed these birds congregated in

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

thousands during autumn on the dead limbs of trees, which were often quite black with them. It was evidently their annual meeting preparatory to their migration by taking flight to warmer parts in North Australia and elsewhere. Next morning they would be all gone, having departed during the night unnoticed, save a few stragglers who had rallied up too late to join the others. At Mullion Creek, near Orange, N.S.W., some few years ago, a very large hollow tree had been felled during the winter, and strange to say was found to be full of Swallows in a torpid state. It was not far from the Mullion Creek railway station, and in fairly rough country. An egg of the clutch measures in inches = 0·72 × 0·50.

[illegible]	377	3

EASTERN SWALLOW,
Hirundo javanica, Sparrman.

Set of 3 eggs, taken at Thursday Island, Torres Straits, North Queensland, on the 30th of September, 1895, by W. Black. They are very heavily blotched all over, and are a little different to those of the previous species. An egg of the clutch measures = 0·73 × 0·48.

409	128	3

WHITE-THROATED FLY EATER OR NATIVE CANARY,
Gerygone albigularis, Gould.

Set of 3 eggs, taken at South Grafton, Clarence River, N.S.W., by Sid. W. Jackson, on the 31st of July, 1892. The nest, which is shown in the accompanying photograph, was placed in a Spotted Eucalypt sapling (*Eucalyptus maculata*), on Blanch's Ridge. The beautiful dome-shaped nests of this bird are often placed in saplings which are covered with ants, and it would be interesting to know why such trees are chosen. In the Clarence River district we have sometimes found these pensile nests placed in trees at an altitude of 50 feet, and in such cases they are well hidden from the eye of the collector. The nests are constructed of bark, and are sometimes over a foot in length, the tails being very long. This sweet singing Fly Eater, which is better known as the Native or Bush Canary, was very plentiful everywhere last season (1906), and I found it very common about Sydney. In some nests, which contained an egg of the Bronze Cuckoo, I found that there was an opening at the back, which I presume was the work of the Cuckoo on leaving the nest after she had deposited her egg. An egg of the set measures in inches = 0·67 × 0·45.

NEST OF THE WHITE-THROATED FLY EATER.
(Half natural size.)
Loc., South Grafton, Clarence River, N.S.W.
(*See data No. 409.*)

411	12	3
	13	1

Taken by T. Williams, near Rockhampton, Queensland, on the 3rd of December, 1901. An egg of the Little Bronze Cuckoo was found with this set of 3 eggs. Specimen A. measures = 0·71 × 0·46.

LITTLE BRONZE CUCKOO,
Chalcococcyx malayanus, Raffles.

One egg, taken with latter set of eggs. It measures in inches = 0·74 × 0·50.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
411	136	3

BLACK-THROATED FLY EATER,

Pseudogerygone personata, Gould.

Set of 3 eggs, taken at Cape York, North Queensland, by H. Barnard, during November of 1896. (See A. J. Campbell's book, page 163.) An egg of this rare set measures = 0·72 × 0·45.

412	130	1

SOUTHERN FLY EATER,

Pseudogerygone culicivora, Gould.

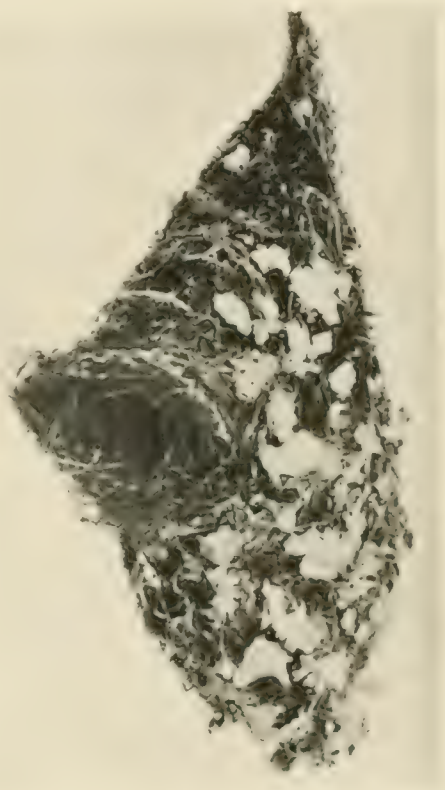
One egg, which was taken near Albany, in Western Australia, during October of 1889, by A. J. Campbell. It measures = 0·65 × 0·45.

413	132	2

LARGE-BILLED FLY EATER,

Pseudogerygone magnirostris, Gould.

Two eggs, taken by E. Drew, on the Mangrove belts near the mouth of the Nicholson River, North-west Queensland, on the 1st of January, 1895. During September of 1887 I found a Fly Eater's nest built in a Mangrove tree (*Avicennia officinalis*), which stood in the open waters of Moreton Bay, Queensland, and from it I took an egg of the Bronze Cuckoo, which specimen is now in this collection. (See data No. 103.) Specimen A. measures = 0·67 × 0·50.



NEST OF THE BROWN FLY EATER.
(More than half natural size
Loc., Binna Burra Scrubs, Richmond River.
(*See data No. 414.*)

414	133	5

BROWN FLY EATER,

Pseudogerygone fusca, Gould.

Very large clutch of 5 eggs; 3 are usually found. It was taken at Binna Burra scrubs, about 18 miles north-east of Lismore, Richmond River district, New South Wales, on the 3rd of November, 1899. The nest is a beautiful structure, and was suspended from the extremity of a Lawyer Vine (*Calamus australis.*) See accompanying photograph. There is no scrub at Binna Burra now (1907), the rapid and marvellous growth of the dairying industry having necessitated the cutting away of many miles of rich tropical growth, both here and on other rivers of north-eastern New South Wales. The beautiful Don Dorrigo lands, of the Upper Bellinger River district, are now being selected and put under cultivation, and all the valuable timbers being destroyed. It was in this Don Dorrigo scrub that we found the *Atrichia's* nest and eggs, as well as other species, during October of 1898. Taken by W. McEnerny and Sid. W. Jackson. The nest of this bird is a very beautiful dome-shaped structure, composed of fine roots and long threads of a green tree-climbing moss (*Hypnum*), and is decorated with the white silk-like webs and cocoons of spiders, and frequently quite a quantity of lichen is fastened to it. The bird lives in the rich dense scrubs, and I have never met with one in the forest or open bush. Its note is quite different to that of the White-throated Fly Eater, and is a feeble little twitter which resembles—"two tid ed ed, two tid ed ed, two tid ed ed," and is uttered rapidly, the *tid ed ed* being of a higher tone than the first note. Specimen A. of this set measures in inches = 0·63 × 0·47.

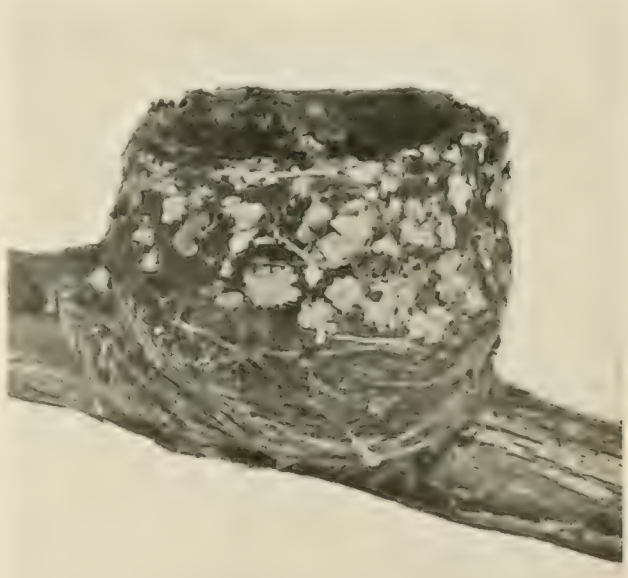
415	133	3

Set of 3 eggs, taken by Sid. W. Jackson in the scrub at Bumble Creek, Ourimbah, near Gosford, N.S.W., on the 15th of October, 1904. The nest was suspended from a branch of the large-leaved

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			Maiden's Blush tree (*Echinocarpus australis.*) In company with Harold Blakeney I found several of these nests at Ourimbah, in December of 1905, but the birds had deserted them, and those which originally contained one egg were found empty on our second visit, whereas they really should have had two or three eggs in each. They are the strangest little creatures in the bush, on account of the way in which they carry their eggs away from the nests. An egg of this set measures = 0·60 × 0·43.

Drawer L.

416	100	3	RESTLESS FLYCATCHER, *Sisura inquieta*, Latham. Well marked set of 3 eggs, taken by C. Reid and Sid. W. Jackson, at Swan Creek, Clarence River, N.S.W., on the 16th of September, 1894. The nest, which contained also an egg of the Pallid Cuckoo, was built in a Swamp Mahogany (*Eucalyptus robusta*), at an altitude of 40 feet. Specimen A. measures = 0·78 × 0·58.
	450	1	PALLID CUCKOO, *Cuculus pallidus*, Latham. One egg, taken with the above set of 3 Flycatcher's eggs. This Cuckoo lays a very small egg for its size. It measures = 0·92 × 0·70.
417	104	3	SHINING FLYCATCHER, *Piezorhynchus nitidus*, Gould. Set of 3 eggs, taken by E. Drew from one of the Mangrove belts on the Nicholson River, North-west Queensland, on the 24th of December, 1895. Specimen A. measures = 0·83 × 0·59.
418	97	3	SATIN FLYCATCHER, *Myiagra nitida*, Gould. Set of 3 eggs, taken by M. W. Harrison, at Glenorchy, Tasmania, on the 1st of December, 1894. Specimen A. measures = 0·74 × 0·56.
419	95	3	LEADEN-COLOURED FLY-CATCHER, *Myiagra rubecula*, Latham. Set of 3 eggs, taken on the 3rd of December, 1893, by Frank and Sid. W. Jackson, at Clarenza, South Grafton, New South Wales. The nest, a photograph of which accompanies this description, was built on a small dead limb of a tall Yellow Box Eucalypt (*Eucalyptus melliodora*), and placed at an altitude of 69 feet. We found many of these pretty nests, and they were always very high up in the Eucalyptus trees, being in such awkward positions as to render them often very difficult to scoop the eggs from. I also found several nests built in the tall Blackbutt trees (*Eucalyptus pilularis*) about Roseville and Chatswood, near Sydney, during September and October of 1906. An egg of the set measures = 0·68 × 0·53.



NEST OF THE LEADEN-COLOURED FLYCATCHER.
(Almost natural size.)
Loc., Clarenza, South Grafton, N.S.W.
(*See data No. 419.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
420	96	3	BLUE FLYCATCHER, *Myiagra concinna*, Gould.

Set of 3 eggs, taken 30 miles inland from Burketown, North-west Queensland, by E. Drew, on the 8th of December, 1895. The nest was built on a thin horizontal branch of a Eucalypt, near his camp. An egg of this clutch of rare specimens measures in inches = 0·67 × 0·52.

421	94	3	BLACK AND WHITE FANTAIL, *Rhipidura tricolor*, Vieillot.

Set of 3 eggs, taken by Sid. W. Jackson at Clarenza, near Swan Creek, South Grafton, N.S.W., on the 16th of September, 1894. The ground colour of this set is very light, being almost pure white. The nest was found in a Swamp Oak (*Casuarina glauca*). Specimen A. measures = 0·77 × 0·58.

422 94 3 Set of 3 eggs, taken by Frank and Sid. W. Jackson, at Swan Creek, South Grafton, Clarence River, N.S.W., on the 20th of October, 1893. The nest was built in an Apple tree (*Angophora subvelutina*), and near one of the Magpie Lark (*Grallina*). These happy little birds I have found frequently building their neat cobweb-bound nests near those of the Magpie Lark, and in Toowoomba, Queensland, it was nearly always the case. This clutch is of the dark ground variety, and the 3 eggs are beautifully zoned near the centre. In the Clarence River district we found the nests sometimes built upon small horizontal roots, which projected from the banks of small gullies. They often build very high, and we have seen some nests which were placed at an altitude of eighty feet, and in such cases it is quite impossible to discover them, unless the birds are observed going to and fro. During October of last season (1906), in company with J. W. Dawson, I found one nest placed *over* eighty feet from the ground, in a Black-butt Eucalypt (*Eucalyptus pilularis*) in the bush west of Chatswood, near Sydney. This bird, which is also well known as the "Wagtail or Shepherd's Companion," may frequently be seen dancing up and down the backs of cattle and horses, etc., in search of insects, such as gnats, flies, small moths, and other microlepidoptera, etc., and it also hops about in the grass before the very mouths of these animals while they are feeding, watching to capture the insects as they are hunted from their hiding places on the ground. The note of this bird, which resembles "sweet pretty little creature," I have often heard on calm moonlight nights; likewise those of other diurnal birds, such as the Blue Wren, Reed Warbler, Forest Kingfisher, etc. The Wagtail is well known throughout Australia, owing to its very tame and domestic habits. One egg of the set measures in inches = 0·77 × 0·58.

423	—	2	NORTHERN FANTAIL, *Sauloprocta picata*, Gould.

This species is not in A. J. Campbell's book, but is quoted in Gould's Handbook to the Birds of Australia, spm. 140. This set of two eggs was taken at Normanton, Gulf of Carpentaria district, North Queensland, on the 16th of July, 1895, by a man engaged by E. Drew. These eggs are much smaller and rounder than those of their southern congener (*R. tricolor*). The markings are very minute. Specimen A. measures in inches = 0·67 × 0·53.

424	108	3	BLACK-FACED FLYCATCHER, *Monarcha melanopsis*, Vieillot.

Beautiful set of 3 eggs, which are heavily zoned at the larger ends, and resemble small eggs of the *Grallina picata*. The eggs in this clutch are unusually large, and boldly blotched. Taken by Arthur A. and P. Boon, and Sid. W. Jackson, in a scrub near Tyringham, about 55 miles south-west of Grafton, N.S.W., on the 23rd of October, 1898. The nest, as usual, was a magnificent structure, ornamented with climbing and other mosses (*Hypnum*, *Meteorium*), which were actually alive and glistened with moisture as they grew around the cup-shaped nest. The inside was neatly lined with fine black hair-like fern roots, which could very easily be mistaken for horse-hair prior to close inspection. I found more of these handsome nests in the scrubs at Ourimbah, near Gosford, N.S.W., than I did anywhere else, and my finds there totalled up to 34 nests for season 1905, from which I took a good

Data No.	No. in A. J. Campbell's Book.	No of Eggs.	

number of sets. These eggs vary considerably in their shape and size, and in the general disposition of the markings. In order to facilitate matters when hunting for the nests of this species, the pair of birds should first of all be located, and to do so requires some care and patience. They can afterwards be watched with much more comfort, and if building operations are going on you will soon notice them carrying moss; then by carefully watching their movements you can trace them up to the spot. The nests are generally very picturesque in their situation, and are placed in quite a variety of positions, but they mostly like to build near a creek running through a well-shaded part of the scrub. Some I have found placed only four feet from the ground, others twelve, and again I have taken some at a height of over 30 feet in the Maiden's Blush tree (*Echinocarpus australis*). The most familiar note of the bird is, as near as I can describe it, "give us a chew, whack, give us a chew." Often it is repeated several times quickly without the *whack* to it, but ultimately it is brought in. (See A. J. Campbell's book at foot of page 133, and top of page 134). These birds very often desert their nests if you pass close to where they are busy building. My first acquaintance with this fascinating Flycatcher, and also with their nests and eggs, was made under very favourable conditions in the scrubs near the Monkey Waterholes, at the foot of the mountain range below Picnic Point, near Toowoomba, Queensland, during October of 1883. Two nests were found, one of which contained two fresh eggs, which went into the collection of L. and Sid. Isles, who were also members of the Grammar School party of ramblers on that occasion. An average specimen of the set measures in inches = 0·96 × 0·67.

425 108 3

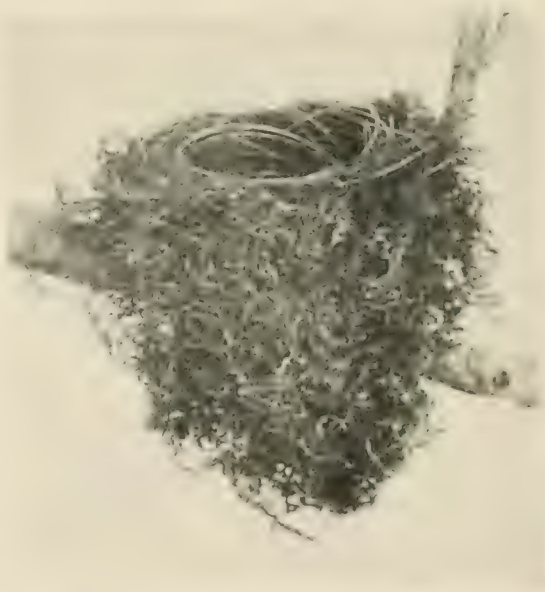
Perfect set of 3 eggs, and are not so heavily blotched as the latter set, but the markings are more broken away from the zone at the larger ends. Data same as set No. 424. Specimen A. measures = 0·90 × 0·67.

426 108 3

Set of 3 eggs, taken at Booyong, near Lismore, N.S.W., by I. Foster, W. McEnerny, and Sid. W. Jackson, on the 11th of November, 1899. The spots are more evenly distributed all over the shell in this set. Specimen A. measures in inches = 0·88 × 0·63.

427 108 3

Set of 3 eggs, with markings which are almost infinitesimal, and is the only clutch I have seen so very finely spotted. Taken near Geo. Dietz's Cedar scrub, Don Dorrigo, Upper Bellinger River, New South Wales, on the 13th of October, 1898, by Jno. McEnerny, Frank and Sid. W. Jackson. The ground colour in this set is very white. Specimen A. measures in inches = 0·93 × 0·68.



NEST OF THE BLACK-FACED FLYCATCHER.
(Less than half natural size.)
Loc., Tyringham, near Grafton, N.S.W.
(*See data No. 424, page 75.*)

428 108 2

Set of 2 eggs, well marked all over. They were taken from a nest in Frazer's gully, opposite "Ashleigh," Ourimbah, near Gosford, N.S.W., on the 12th of December, 1905, by Sid. W. Jackson. The nest was built in a small tree growing in the rocky bed of the palm and fern clad gully. I found that two eggs generally formed the full clutch at Ourimbah scrubs, and not three, as was nearly always the case in the Clarence and Richmond River districts. Specimen A. measures in inches = 0·90 × 0·68.

[illegible] [illegible] 2

BROWN FLYCATCHER,

Microeca fascinans, Latham.

Set of 2 eggs, taken on the 30th of September, 1894, by Frank and Sid. W. Jackson, at Ti Tree Creek, South Grafton, N.S.W. The nest was built at the end of a horizontal branch of a Bloodwood

Data No. | No. in A. J. Campbell's Book. | No. of Eggs.

Eucalypt (*Eucalyptus corymbosa*), at an altitude of 46 feet. It was very small, and only measured one inch and a half across. This Flycatcher, which is also well known to Australians as the "Jacky Winter" or "Stumper," is certainly one of the most plainly coloured of our native birds, and by the casual observer is passed almost unnoticed. Most of the Flycatchers leave us and go north during the cold months, but Jacky Winter stays behind and keeps us company, and hence the name. During the winter, when most of the other birds are dull, his clear sweet—"tweet-tweet-tweet, twitter-twitter-twitter," may be heard incessantly all through the day, though in the mornings he is at his best. Before sunrise, and ere many of us have left our beds, he gives us the whole repertoire of his songs; besides, he is for ever on the move, positively displaying a spirit of the utmost happiness and contentment. During breeding season, and when the hen bird is sitting on her tiny nest, which has been securely fastened with cobwebs into the fork of a thin horizontal limb, he seats himself on the very pinnacle of the tallest dead branch of the tree, fanning his tail from side to side, and singing away as if all the world had ears turned towards him; then he suddenly flies down after some small insect, and quite fearlessly brings his little pallid body within a few feet of your face. Snip-snap his little bill goes, and on capturing his dainty morsel he returns to his elevated seat, and repeats his song. We find him everywhere; in the wild and most solitary parts of the bush, in the country town, or around the cottage and the farm yard, and he is even to be heard frequently twittering away in the tall trees of the large parks and gardens of Sydney. He loves company, and therefore likes to dwell near habitation if possible. The nest is the smallest made by any of the Australian birds. Specimen A. measures = 0·73 × 0·55.

82 | 2 | Set of 2 eggs, taken in the bush at Roseville, near Sydney, by J. W. Dawson and Sid. W. Jackson, on the 23rd of November, 1906. The nest was built on a dead branch of a Peach tree, which stood beside a Christmas Bush (*Ceratopetalum gummiferum*), near a narrow creek, and was situated only 10 feet from the ground. (See accompanying photograph.) Specimen A. measures = 0·71 × 0·53.

NEST AND EGGS OF THE BROWN FLYCATCHER, AND ALSO AN EGG OF THE SQUARE-TAILED CUCKOO.
(Almost natural size.)
Loc., Roseville, near Sydney.
(*See data No. 430.*)

452 | 1 | SQUARE-TAILED CUCKOO,
Cacomantis variolosus, Horsfield.

Taken with the latter set of Brown Flycatchers' eggs. Data ditto. This Cuckoo's egg measures = 0·74 × 0·55.

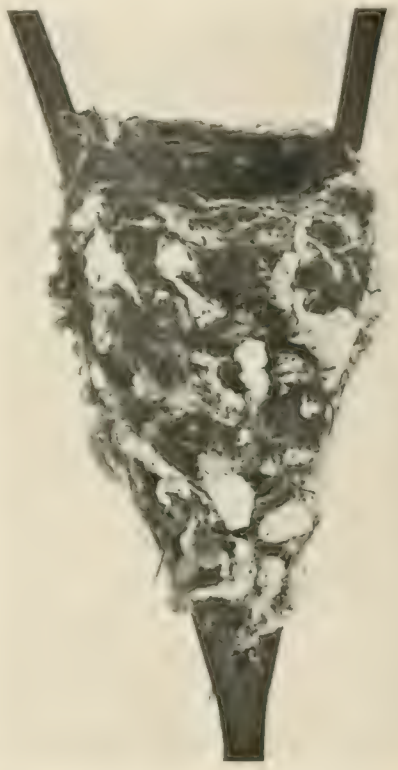
431 | 83 | 1 | LESSER BROWN FLYCATCHER,
Micræca assimilis, Gould.

One egg only, which was taken from a nest near Broome, North-west Australia, by F. J. Buttler, during the first week of September, 1898. It measures in inches = 0·70 × 0·52.

432 | 105 | 2 | SPECTACLED FLYCATCHER,
Monarcha gouldi, Gray.

Beautiful set of 2 eggs, taken by Frank and Sid. W. Jackson, in Alipou Scrub, South Grafton, Clarence River, N.S.W., on the 31st of December, 1893. The nest, which is shown in the accompanying photograph on page 78, was composed of green moss, the outside of which was decorated with the green and white cocoons, or egg-bags, of spiders, and was lined inside with black hair-like roots, similar to those used in the nests of *Monarcha melanopsis*. It was placed in the fork of a small shrub, four

Data No	No. in A. J. Campbell's Book.	No. of Eggs	
			feet from the ground, on the South bank of Alipou Creek. These birds were very numerous in the scrubs of the Clarence River district during 1893. The nest is still in perfect condition. An egg of this set measures in inches = 0·82 × 0·60.
433	100	3	WHITE-BELLIED FLYCATCHER, *Monarcha albiventris*, Gould. Perfect clutch of 3 eggs, taken near Cairns, North Queensland, by W. Burton, on the 8th of November, 1898. The eggs are similar to those of the previous species, but are more rounded and much smaller. Two eggs usually form the setting. An egg of the clutch measures in inches = 0·72 × 0·55.
	86	3	WHITE-SHAFTED FANTAIL, *Rhipidura albiscapa*, Gould. Set of 3 eggs, taken by Sid. W. Jackson in the Ourimbah scrubs near Gosford, N.S.W., on the 15th
434			of December, 1905. An egg of the Square-tailed Cuckoo was also found in the nest. Specimen A. measures in inches = 0·62 × 0·48.
	452	1	SQUARE-TAILED CUCKOO, *Cacomantis variolosus*, *Horsfield.* One egg, taken with latter set of Fantails' eggs. It measures in inches = 0·76 × 0·53.
	86	2	WHITE-SHAFTED FANTAIL, *Rhipidura albiscapa*, Gould. Set of 2 eggs, which are very small specimens, and were taken near Middle Harbour, Roseville, Sydney, by Sid. W.
435			Jackson, on the 2nd of December, 1906. An egg of the Narrow-billed Bronze Cuckoo was also found in the nest. See photograph on page 79. Specimen A. measures in inches = 0·58 × 0·46.
	455	1	NARROW-BILLED BRONZE CUCKOO, *Chalcococcyx basalis*, Horsfield. One egg, taken with latter set of Fantails' eggs. This Cuckoo utters a long shrill plaintive note, which is often kept up incessantly for many hours during the stillness of the night, and irritates a person to such an extent that his sleep is entirely lost. While I was camped in the Booyong scrubs, near Lismore, N.S.W., in 1899, one of these birds haunted the locality, and for two weeks kept up its aggravating note all night, as it sat well out of reach in a tall Booyong tree (*Tarrietia actinophylla*) near my tent, and it caused me very much annoyance—in fact, for weeks after I imagined I could hear the distressed call of that wretched bird. The egg measures in inches = 0·70 × 0·47.
436	86	3	WHITE-SHAFTED FANTAIL, *Rhipidura albiscapa*, Gould. Set of 3 eggs, taken on the banks of the Orara River, near Grafton, N.S.W., on the 21st of August, 1892. Taken by Frank and Sid. W. Jackson. The beautiful cobweb-bound nests of this species resemble, with their long tapering tails, a wine glass with the flat base removed. In the Clarence River district I have known this species, and also the Rufous Fantail, to frequently remove their eggs from the nest if they saw any person near the tree. If a nest was discovered containing only a single egg,



NEST OF THE SPECTACLED FLYCATCHER.
(More than half natural size.)
Loc., Alipou Scrub, South Grafton, N.S.W.
(*See data No. 432, page 77.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			and it was left in order to get the full sitting, this specimen would be found broken on the ground under the nest the next morning, or be removed altogether. On the other hand, however, if you took the single egg, then a second one would be found in the nest the following day. This seems very perplexing, and H. Barnard had just the same experience with the eggs of Prince Albert Rifle Bird of Paradise (*Ptilorhis alberti*) in the scrubs at Cape York, North Queensland, during 1896. Specimen A. measures in inches = 0·66 × 0·47.
437	87	3	WESTERN FANTAIL, *Rhipidura preissi*, Cabanis. Set of 3 eggs, taken near Broome, North-west Australia, by F. J. Buttler, on the 14th of November, 1898. The ground colour is nearly white in these specimens. The birds are plentiful in certain parts of the north-west coast. An egg of the clutch measures in inches = 0·60 × 0·47.
438	88	3	DUSKY FANTAIL, *Rhipidura diemenensis*, Sharpe. Set of 3 eggs, taken at Bridgewater, Tasmania, by A. Ross, on the 4th of September, 1893. An egg of the clutch measures = 0·63 × 0·48.
439	91	2	NORTHERN FANTAIL, *Rhipidura setosa*, Q. and G. Set of 2 eggs, taken by C. Woodlands in the Nicholson River district, North-west Queensland, on the 3rd of November, 1897. The nest was placed on a thin horizontal branch of a small Eucalypt, leaning out over a creek. An egg of the clutch measures in inches = 0·64 × 0·47.
440	93	2	WHITE-FRONTED FANTAIL, *Rhipidura phasiana*, De Vis. Set of 2 of these rare eggs (not described in A. J. Campbell's book), taken by E. Drew (who had found these nests before) near Normanton, Gulf of Carpentaria, North Queensland, on the 3rd of January, 1896. The eggs, which are nearly white, are zoned at the larger ends with small roundish dots of slate and brownish-grey. An egg of the clutch measures in inches = 0·61 × 0·47.
441	89	2	RUFOUS FANTAIL, *Rhipidura rufifrons*, Latham. Set of 2 eggs, and also one belonging to the Square-tailed Cuckoo. Taken by Sid. W. Jackson at Ourimbah, near Gosford, N.S.W., opposite the railway station, in the scrub, on the 4th of December, 1905. The nest was built on a Scrub Vine (*Vitis*) hanging across a track, and situated 10 feet from the ground. An egg of the clutch measures in inches = 0·68 × 0·47.
	452	1	SQUARE-TAILED CUCKOO, *Cacomantis variolosus*, Latham. One egg, taken with the latter set of 2 Rufous Fantails' eggs. It measures in inches = 0·72 × 0·54.

NEST OF THE WHITE-SHAFTED FANTAIL.
(Almost natural size.)
Loc., Roseville, near Sydney.
(*See data No. 135, page 75.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
442	89	3	RUFOUS FANTAIL, *Rhipidura rufifrons*, Latham. Set of 3 eggs, which are unusually large and beautifully zoned specimens. Taken by Frank and Sid. W. Jackson in the Don Dorrigo scrubs, Upper Bellinger River district, N.S.W., on the 4th of October, 1898. An egg of this splendid clutch measures in inches = 0·74 × 0·52.
443	[illegible]	3	Set of 3 eggs, which are much smaller than those of the two previous clutches. Taken by Fred. Smidt and Sid. W. Jackson in the scrub on Susan Island, in the Clarence River opposite Grafton, N.S.W., on the 16th of December, 1892. The nest was built in a *Lantana* bush. An egg of the set measures in inches = 0·63 × 0·48.
444	307	3	STRIPED HONEY EATER, *Plectorhynchus lanceolatus*, Gould. Beautiful clutch of 4 eggs, taken by J. Bell at Pearl Creek, North Queensland, on the 9th of September, 1898. The eggs are not unlike some specimens of those of *Monarcha melanopsis*. This bird, which confines itself to the interior parts of N.S.W., is seldom met with on the coast, and during my peregrinations I only came across it twice, my first acquaintance with it being made at Copmanhurst, Upper Clarence River district, N.S.W., during January of 1900. While on a visit to the Ourimbah scrubs, near Gosford, N.S.W., in November of 1905, I again had the pleasure of meeting with this interesting species, and paid much attention to its extraordinary note, which is a very clear sweet whistle, and is kept up for a considerable time, being rather like a loud warble of the White Eye (*Zosterops*). When first I heard it, and before seeing the bird, I immediately concluded it was a Bower Bird engaged mimicking the latter species. Specimen A. measures = 0·88 × 0·68.
445	307	4	The eggs of this set are very long specimens, and not nearly so rounded as those of the latter set. Data ditto. Specimen A. of the clutch measures = 0·98 × 0·68.
446	334	2	YELLOW-TUFTED HONEY EATER, *Ptilotis auricomis*, Latham. Set of 2 eggs, taken by Sid. W. Jackson at Botany Bay, Sydney, on the 22nd of October, 1902. An egg of the Pallid Cuckoo was also found in the nest. Specimen A. measures = 0·87 × 0·62.
	150	1	PALLID CUCKOO, *Cuculus pallidus*, Latham. One egg, taken with latter set. It measures = 0·92 × 0·68.
447	328	3	YELLOW-FACED HONEY EATER, *Ptilotis chrysops*, Latham. This heavily blotched clutch of 3 eggs was taken by Sid. W. Jackson, in the bush at Rose Bay, Sydney, on the 13th of September, 1902. This bird was very common in the bush at Five Dock, near Sydney, during season 1890. An egg of the set measures = 0·83 × 0·57.
448	328	3	Set of 3 eggs, which are lighter in the ground colour, and not so heavily blotched as those of the latter set. Taken by A. Boon, at Cloud's Creek, near Grafton, N.S.W., on the 29th of July, 1895. An egg of the set measures = 0·80 × 0·57.
449	320	2	YELLOW-SPOTTED HONEY EATER, *Ptilotis notata*, Gould. Set of 2 eggs, taken by Harry Barnard, at Cape York, North Queensland, on the 4th of November, 1896. Specimen A. measures = 0·84 × 0·62.
450	326	2	SINGING HONEY EATER, *Ptilotis sonora*, Gould. Set of 2 eggs, taken by T. A. Brittlebank at Myrniong, Victoria, on the 6th of October, 1900. I found the nest and eggs of this species only on one occasion, and that was near South Grafton, N.S.W., during September of 1891. One egg of the clutch measures = 0·92 × 0·68.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
451	330	2	YELLOW-THROATED HONEY EATER, *Ptilotis flavigularis*, Gould.

Set of 2 eggs, taken by M. W. Harrison at Glenorchy, Tasmania, on the 29th of September, 1898. Specimen A. measures in inches = 0·93 × 0·65.

452	338	3	WHITE-PLUMED HONEY EATER, *Ptilotis penicillata*, Gould.

Set of 3 eggs, taken on the 23rd of October, 1898, at Cloud's Creek, south-west of Grafton, N.S.W., by A. Boon and Sid. W. Jackson. The nest was built in the fronds of a Tree Fern (*Alsophila*). Specimen A. measures in inches = 0·78 × 0·57.

453	338	2	

Set of 2 eggs, white ground variety, taken by J. W. Mellor at the Reedbeds, near Adelaide, South Australia, on the 10th of September, 1885. Specimen A. is larger than specimen B., and it measures = 0·80 × 0·57.

454	332	2	WHITE-EARED HONEY EATER, *Ptilotis leucotis*, Latham.

Set of 2 eggs, taken at Little Bay, near Sydney, by Sid. W. Jackson, on the 23rd of October, 1902. The nest was built in a small *Melaleuca* bush. Specimen A. measures in inches = 0·82 × 0·60.

455	322	3	FUSCOUS HONEY EATER, *Ptilotis fusca*, Gould. (*Ptilotis lewini* are in drawer M.)

Set of 3 eggs, which are unusually large and very dark coloured specimens, was taken by W. McEnerny, Frank and Sid. W. Jackson, on the 9th of September, 1894, at Sandy Creek, near South Grafton, N.S.W. The nest was placed at an altitude of 30 feet, in a Bloodwood Eucalypt (*Eucalyptus corymbosa*). This bird I found very common in the Eucalyptus forests of the Clarence River district. An egg of the clutch measures in inches = 0·79 × 0·58.

456	322	2	

Set of 2 eggs, which are much smaller and lighter coloured specimens than those of the latter set. Taken near Bostobric, Don Dorrigo, New South Wales, by Frank and Sid. W. Jackson, on the 14th of October, 1898. Specimen A. of this set measures = 0·72 × 0·53.

457	318	2	PIED HONEY EATER, *Entomophila leucomelas*, Cuvier.

Clutch of 2 eggs, taken by L. Dumas, in the north-west of Australia, on the 3rd of November, 1901. One egg is more pointed and darker than the other, while in colour they are quite different to all the other eggs of the Honey Eater family, and resemble small specimens of those of the common Wood Swallow (*A. sordidus*). An egg of this rare and interesting set measures in inches = 0·89 × 0·63.

458	291	3	BLOOD HONEY EATER, *Myzomela sanguinolenta*, Latham.

Perfect set of 3 eggs, taken at Yellow Gully, six miles from South Grafton, N.S.W., on the 11th of November, 1894, by R. Helms, W. McEnerny, J. McEnerny, W. Toole, Frank and Sid. W. Jackson. The nest was placed at the extremity of a long limb of a tree (*Duboisia Sp.*), and in order to procure the eggs from it a long pole was erected and secured with three guy lines, the rare specimens being thus safely landed. In company with J. P. Macfarlane I saw great numbers of these birds at Bulimba, near Brisbane, during September of 1906, where they were feeding on the white honey-laden blossoms of the tall Swamp Ti Trees (*Melaleuca*), which were just dotted with these pretty little blood-coloured creatures, and the trees looked half red and white; I never saw so many congregated together before anywhere. We have only taken about seven clutches of these eggs altogether, during our residence of nearly ten years in the Clarence River district of New South Wales. Some seasons they breed freely about Sydney, which is the stronghold for a great many of the *Meliphagidæ*. An egg of this clutch measures in inches = 0·62 × 0·47.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
459	293	2	BLACK HONEY EATER, *Myzomela nigra*, Gould.

Set of 2 eggs, which are unfortunately badly blown specimens. They were taken in the interior of Victoria during September of 1890. The eggs very much resemble heavily blotched specimens of those of the Rufous Fantail, only they are smaller and more compressed ovals. Specimen A. of this clutch measures in inches = 0·58 × 0·47.

460	340	3	WHITE-BEARDED HONEY EATER, *Meliornis novæ hollandiæ*, Latham.

Set of 3 eggs, large specimens, taken by Sid. W. Jackson, at Rose Bay, near "Cranbrook," State Government House, Sydney, on the 22nd of January, 1904. The nest was placed in a cluster of the beautiful *Tecoma australis*. One egg of the clutch measures in inches = 0·84 × 0·57.

461	348	2	WHITE-CHEEKED HONEY EATER, *Meliornis sericea*, Gould.

Set of 2 eggs, taken at Lindfield, Sydney, on 9th of August, 1906, by Sid. W. Jackson. The nest was built in a small shrub, and placed only six inches from the ground. The birds took twenty days to build the nest, which is a rather unusual length of time. An egg of the clutch measures = 0·75 × 0·58.

462	347	2	LONG-BILLED HONEY EATER, *Meliornis longirostris*, Gould.

Set of 2 eggs, taken near Albany, West Australia, on the 10th of February, 1903, by T. Harris. An egg of the clutch measures = 0·85 × 0·60.

463	349	3	MOUSTACHED HONEY EATER, *Meliornis mystacalis*, Gould.

Set of 3 pale specimens, taken by T. Harris, near Albany, West Australia, on the 7th of December, 1902. An average specimen of the clutch measures in inches = 0·83 × 0·57.

464	345	3	CRESCENT HONEY EATER, *Meliornis australasiana*, Shaw.

Clutch of 3 eggs, taken by M. W. Harrison at Glenorchy, Tasmania, on the 11th of October, 1896. An egg of the set measures in inches = 0·73 × 0·55.

465	309	2	WHITE-FRONTED HONEY EATER, *Glycyphila albifrons*, Gould.

Set of 2 eggs, taken by T. A. Brittlebank in the northern Mallee country of Victoria, on the 9th of October, 1899. Specimen A. measures = 0·75 × 0·55.

466	308	2	FULVOUS-FRONTED HONEY EATER, *Glycyphila fulvifrons*, Lewin.

Set of 2 eggs, taken by A. F. Basset Hull and Sid. W. Jackson, at Freshwater, near Manly, Sydney, on the 29th of September, 1901. This bird is rather plentiful about Manly and La Perouse, near Sydney, where it confines itself to the heath and stunted vegetation. An egg of the clutch measures = 0·83 × 0·60.

467	310	2	WHITE-BREASTED HONEY EATER, *Glycyphila fasciata*, Gould.

Set of 2 rare eggs, taken by H. Barnard in the Dawson River district, North Queensland, on the 13th of November, 1893. Specimen A. measures in inches = 0·73 × 0·53.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
468	311	2	BROWN HONEY EATER, *Glycyphila ocularis*, Gould. Set of 2 eggs, taken on the Fitzroy River, North Queensland, by H. Barnard, on the 24th of August, 1902. These specimens are white, and possess rather large blotches. Specimen A. measures in inches = 0·63 × 0·49.
469	311	2	Data same as latter set. The eggs of this clutch are of a pale flesh-ground colour, and possess perfect zones of very minute markings. Specimen A. measures = 0·61 × 0·48.
470	316	2	RED-THROATED HONEY EATER, *Entomophila rufigularis*, Gould. Set of 2 eggs, taken by G. A. Keartland at the junction of the Fitzroy and Margaret Rivers, North-west Australia, on the 12th of February, 1897. The larger egg of the two measures = 0·72 × 0·47.
471	317	2	RUFOUS-BREASTED HONEY EATER, *Entomophila albigularis*, Gould. Set of 2 eggs, taken by C. Woodlands on the Nicholson River, North-west Queensland, on the 16th of January, 1898. (See A. J. Campbell's book, page 379.) Very rare. Specimen A. measures = 0·76 × 0·53. Specimen B. = 0·72 × 0·52.
472	313	3	BROWN-BACKED HONEY EATER, *Glycyphila modesta*, Gray. Set of 3 eggs, taken by C. A. Barnard, at North Queensland, in the Ti Tree (*Melaleuca*) country, on the 1st of December, 1893. Specimen A. measures in inches = 0·73 × 0·47.
473	313	2	Set of 2 eggs, data same as latter set. One egg is in rather poor condition. Specimen A. measures = 0·67 × 0·48.
474	301	2	BLACK-CHINNED HONEY EATER, *Melithreptus gularis*, Gould. Set of 2 eggs, taken on the 30th of December, 1897, at Glen Ugie Peak, near South Grafton, N.S.W., by Frank and Sid. W. Jackson. The nest was built in a Ti Tree (*Melaleuca*), and the eggs were in a very advanced state of incubation. Specimen A. measures in inches = 0·71 × 0·56.
475	302	3	STRONG-BILLED HONEY EATER, *Melithreptus validirostris*, Gould. Set of 3 eggs, taken near Circular Head, Tasmania, by H. Ross, on the 27th of October, 1896. Specimen A. of this beautiful clutch measures = 0·77 × 0·57.
476	208	1	WHITE-NAPED HONEY EATER, *Melithreptus lunulatus*, Shaw. One egg, which was taken with an egg of the Pallid Cuckoo by Geo. Shepherd, near Somerville, Victoria, on the 13th of December, 1897. I found several nests of this species about Sydney, but was always unfortunate in finding those which contained young birds. This specimen measures in inches = 0·74 × 0·56.
	450	1	PALLID CUCKOO, *Cuculus pallidus*, Latham. One egg, taken with the latter. This Cuckoo visits us regularly every September, and departs again to the northern climes in February and March. During season of 1890 my brother (Frank T. A. Jackson), and I when strolling through Rodd's bush paddock at Five Dock, near Sydney, noticed one of these Cuckoo's sitting on a nest of the Yellow-faced Honey Eater (*Ptilotis chrysops*), which was placed in a Turpentine tree (*Syncarpia laurifolia*). When the bird flew away we climbed up to examine the nest, and found that an egg of this Cuckoo had been deposited on the very edge of it, and where it just balanced; no other eggs were in the nest. Each season, when we first hear the peculiar rollicking notes of this Cuckoo after its long absence of five or six months, it creates a feeling of joy in the bird

Data No.	No. in V. J. Campbell's Book.	No. of Eggs.	
			lover's heart, knowing that it is a certain indication that the birds are all in the midst of their nest building operations, and that he can go into the bush once again and watch the work of his feathered friends. The specimen measures = 0·90 × 0·72.
477	299	1	WESTERN WHITE-NAPED HONEY EATER, *Melithreptus chloropsis*, Gould. One egg, taken from a nest by S. Hall, near Albany, West Australia, on the 27th of July, 1895. The nest was found containing only one egg, which was left for three days, when it was again visited, and the bird flew off, but still the one specimen was there. It is more pointed, and of a deeper ground colour than the eastern form, and measures in inches = 0·76 × 0·53.
478	303	2	BROWN-HEADED HONEY EATER, *Melithreptus brevirostris*, V. and H. Set of 2 eggs, taken by T. A. Brittlebank at Myrniong, Victoria, on the 4th of November, 1896. Specimen A. measures in inches = 0·67 × 0·55.
479	296	2	WHITE-BROWED SPINE BILL HONEY EATER, *Acanthorhynchus superciliosus*, Gould. Set of 2 eggs, taken at Wallaroo, near Adelaide, South Australia, by John Laird, on the 14th of November, 1902. Specimen A. measures = 0·71 × 0·52.
480	297	2	SPINE BILL HONEY EATER, *Acanthorhynchus tenuirostris*, Latham. Set of 2 eggs, which are very large round specimens, and was taken at Bostobric, near Don Dorrigo Scrubs, N.S.W., by J. McEnerny, Frank and Sid. W. Jackson, on the 16th of October, 1898. The nest was built in an Oak tree (*Casuarina*). The birds are very plentiful about Sydney. Specimen A. measures = 0·68 × 0·55.
481	297	2	Set of 2 eggs, the particulars of which are the same as the last set. Date of this clutch is the 19th of October, 1898. This handsome bird is also well known about Sydney as the "Cobbler's Awl," on account of its long curved bill resembling that article, and I have frequently watched them extracting the nectar from the wild flowers, which grow in such profusion about Port Jackson, and while thus engaged they flutter before the plant, probing each blossom with their long bill in precisely the same manner as the Humming Bird and the Hawk-Moth. The nest is a small structure warmly lined with feathers, which curve over at the top and hide the eggs when the bird is absent. Specimen A. measures = 0·68 × 0·54.

Drawer M.

482	360	3	BLUE-FACED HONEY EATER, *Entomyza cyanotis*, Latham. Beautiful set of 3 eggs, taken from an old re-lined nest of the Magpie Lark (*Grallina picata*), near South Grafton, Clarence River, N.S.W., on the 9th of September, 1894, by Frank and Sid. W. Jackson. We generally found the eggs of this bird deposited in old nests of the Babbler (*Pomatorhinus*), situated at the very extremity of long horizontal limbs, and at all times very difficult to approach. We have never known the bird to build a nest for itself. Two eggs usually form the full sitting. Writing on this species recalls many pleasant reminiscences of my earlier egg collecting days in the Clarence River

district. In company with my brother, Frank T. A. Jackson, I made my first find of the nest and eggs of this bird at South Grafton, in this district, on August 17th, 1891. The nest was, as is so frequently the case, a deserted tenement of the "Babbler," or as we called it in those days the "Dog Bird," and was situated in the very topmost branches of a tall narrow-leaved Apple Tree (*Angophora lanceolata*), being both difficult and dangerous to approach, and after some hours of hard work with ropes, ladders, poles, etc., in the face of a westerly gale, my brother took the two precious eggs from the old bark-lined structure. They were, however, in a very advanced state of incubation, and in those days of rather primitive egg blowing methods, were beyond our skill to neatly empty, so it was a true case of "loves labour lost." Specimen A. of this clutch (No. 482) measures = 1·27 × 0·87.

ON THE ROAD GOING NESTING, FULLY EQUIPPED.
Loc., South Grafton, Clarence River, N.S.W.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
483	361	2	WHITE-QUILLED HONEY EATER, *Entomyza albipennis*, Gould.

Set of 2 eggs, taken at Port Essington, North Australia, on the 23rd of November, 1895. Received from Chas. French, junr., of Melbourne. Specimen A. measures = 1·14 × 0·85.

484	358	1	LITTLE WATTLE BIRD, (Honey Eater.) *Acanthochæra lunulata*, Gould.

Clutch of 1 egg, taken on the banks of the Blackwood River, South-west Australia, by S. Hall, on the 24th of September, 1895. He has supplied me with many fine specimens from Western Australia. It measures in inches = 1·06 × 0·76.

485	359	1	YELLOW WATTLE BIRD, *Acanthochæra inauris*, Gould,

One egg, taken by E. D. Atkinson, near Hobart, Tasmania, on the 1st of October, 1893. It measures = 1·33 × 0·89.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
486	357	2	BRUSH WATTLE BIRD, *Acanthochæra mellivora*, Latham. Set of 2 eggs, taken by Frank T. A. Jackson at Coff's Harbour, south of the Clarence River, N.S.W., on the 22nd of September, 1894. The nest is a very frail structure of thin sticks, and lined with soft bark. An egg of the Pallid Cuckoo was also found in the nest. My brother and I found this Wattle Bird very plentiful in the Banksia and the dense vegetation along the coast, from the Clarence River Heads south to Coff's Harbour, where we found many of their nests and eggs. Specimen A. measures = 1·13 × 0·75.
	450	1	PALLID CUCKOO, *Cuculus pallidus*, Latham. One egg, taken with the above set. It measures in inches = 0·94 × 0·67.
487	355	3	RED WATTLE BIRD, *Acanthochæra carunculata*, Latham. Set of 3 eggs, collected by H. Taylor at Wilmington, Flinders Range, South Australia, on the 3rd of September, 1886. They have retained their colour wonderfully well, and look only a year or so old, instead of over twenty. Specimen A. measures = 1·40 × 0·85.
488	323	2	YELLOW-EARED HONEY EATER, *Ptilotis lewini*, Swainson. Clutch of 2 eggs, taken at Booyong scrubs, near Lismore, N.S.W., by Sid. W. Jackson, on the 14th of October, 1899. The nest was a beautiful structure, and was placed at an altitude of 18 feet in a Maiden's Blush Tree (*Echinocarpus australis*). The eggs are very heavily blotched at the larger ends. This bird is a dweller in thick scrubby places, and I have never seen it in the forest; its nest, as is the case with most of the Honey Eaters, is very warmly lined with a deep layer of silken down, or pappus, which the birds collect from the ripe seed pods of various native shrubs and vines. The outside of the nest is usually composed of dead leaves, soft bark and masses of cobweb, etc., and is sometimes decorated with the green tree-climbing moss (*Hypnum*), etc. In cases, however, where a homestead stood near the scrub, or where scrub fallers were camped, I sometimes found the nests composed of portions of old newspapers, twine, tape, cotton, etc.; and one nest which I found near Waterfall, south of Sydney, during the season of 1901, was entirely composed of torn portions of the *Sydney Morning Herald*, being neatly lined with coloured wool, which the birds had probably plucked from an old blanket that had been thrown away. The *first* set of these eggs which I found was taken during the season of 1893, and I presented it to a friend in April of 1896, but I am sorry to relate that they met with a very unfortunate end, for somehow or other his dog got hold of the chip box in which the eggs were placed, and crushed and broke up the lot. Specimen A. measures in inches = 0·96 × 0·72.
489	323	2	Set of 2 eggs, which are snow-white rather elongated specimens, and are covered with round dark spots at the larger ends. Taken on the 15th of October, 1898, in the Don Dorrigo scrubs, Upper Bellinger River district, N.S.W., by Frank and Sid. W. Jackson. Specimen A. measures = 1·04 × 0·71.
490	323	2	Set of 2 eggs, which are rather short rounded specimens, and minutely spotted at the larger ends. Taken in Alipou Scrub, South Grafton, N.S.W., by Frank and Sid. W. Jackson, on the 30th of September, 1894. Specimen A. measures in inches = 0·94 × 0·74.
	15	1	PALLID CUCKOO, *Cuculus pallidus*, Latham. One egg, taken with latter set of eggs. It measures in inches = 0·91 × 0·67.
491	359	2	SPINY-CHEEKED HONEY EATER, *Acanthogenys rufigularis*, Gould. Set of 2 eggs, taken by T. A. Brittlebank at Myrniong, Victoria, on the 29th of October, 1894. Specimen A. measures = 1·02 × 0·73.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
492	350	3

BELL MINER OR BELL BIRD,

Manorhina melanophrys, Latham.

Beautiful set of 3 eggs, which are short specimens and were taken near Nymboida, 35 miles south-west of Grafton, N.S.W., by Frank and Sid. W. Jackson, on the 25th October, 1898. The nest was built near the ground, in fern fronds, and as usual was difficult to find. The three eggs are all very richly coloured specimens. It is delightful to enter the forest where the Bell Birds abound, and where their clear sweet bell-like dingle falls upon one's ears with an entrancing cadence. There is often hardly another sound in these ever echoing nooks, and to listen to these birds is a great pleasure, more especially to persons whose calling in life keeps them tied within the busy metropolitan area. The incessant notes resemble the distant dingle of many small sheep bells, the silvery sounds of which go straight to the bird-lovers heart, sending the blood rushing through his veins, and crowning his memory with stately trees, drooping ferns, and mossy dells ; while all the magnificent beauty of the Australian forest and scrub passes along in fanciful procession before him. On an early summer's morn, as a light breeze gently fans the valleys, and the golden tints from the rising sun strike the topmost branches of the trees, and before the pulsating and noisy buzz or rattle of the locust (*Cicada*) has begun, then, above all times, you will hear the exquisite notes of these birds to perfection. They are very local and gregarious in their habits, always keeping together in the same locality, which may cover an area of less than a quarter of a mile square, for years ; and probably no more of their "dingley-dells" will be met with for many miles. They appear to show a decided preference for country where the timbers of the forest and scrub meet, and intermix, and form a sort of jungle. The nests are often placed in ferns only a few feet from the ground, and are at times very difficult to find, yet on the other hand they sometimes build as high as twenty five feet. During my visits to Tyringham and Nymboida, south-west of Grafton, N.S.W., in 1896 and 1898, I found many of them, and was successful in taking sixteen handsome sets of their eggs. These birds are plentiful in the thick jungle-like bush opposite "Ashleigh," at Ourimbah, near Gosford, N.S.W., and several old nests came under my notice there early in 1904, while busily engaged hunting for various natural history specimens ; and had it been breeding season with them I would probably have found their eggs also. The following season (1905) my friend Launcelot Harrison, who is another enthusiastic oologist and field observer, found a nest, containing eggs, at the latter locality. In the near future these and other of our native birds will be a thing of the past at Ourimbah, as well as other places, if the "juvenile pea-rifle bird-killing crusade" is still allowed by the Government authorities to so openly carry on its wanton and ruthless destruction ; then, when it is too late, we will be struck with remorse at the wickedness that has been wrought by our neglect in trying to save from destruction this and other forms of our unique and aristocratic avifauna. To shoot a few birds for scientific purposes is right enough, *c'est une autre chose* ; but I am sorry to relate that there are many of us who have no limitations, and go through life with eyes too dull to watch, much less protect, the birds and their airy existences, which a ruthless love of destruction in some people has driven into shy retirement. Specimen A. measures = 0·88 × 0·66.

493	350	2

Set of 2 eggs, which are long specimens, and were taken by A. and P. Boon near Tyringham, 55 miles south-west of Grafton, N.S.W., on the 1st of October, 1900. Specimen A. measures in inches = 0·96 × 0·63.

494	350	2

Set of 2 eggs, very pale specimens, being nearly white, and were taken by C. French, jnr., at Sandringham, Victoria, on the 4th of July, 1897. Long pointed types. Specimen A. measures in inches = 0·88 × 0·61.

495	350	2

Set of 2 eggs, which are of a rich flesh colour, and are short and somewhat rounded specimens, and were taken by a timber getter in Gippsland, Victoria, during August of 1893. Specimen A. measures in inches = 0·82 × 0·63.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
496	353	4	YELLOW-THROATED MINER, *Myzantha flavigula*, Gould. Set of 4 eggs, taken by J. Watson, at Buckiinguy, Western New South Wales, on the 16th of September, 1897. The eggs are quite different to those of the Soldier Bird Miner. Specimen A. measures = 1·10 × 0·72.
497	352	2	DUSKY MINER, *Myzantha obscura*, Gould. Pair of eggs, taken near Freemantle, West Australia, on the 17th of July, 1888. Specimen A. measures = 1·07 × 0·72.
498	351	4	MINER OR SOLDIER BIRD, *Myzantha garrula*, Latham. Set of 4 eggs, taken by Frank and Sid. W. Jackson, in Walker's paddock, South Grafton, N.S.W., on the 22nd of September, 1897. The nest was built in a Swamp Oak (*Casuarina glauca*) at a height of only 13 feet. This is a nicely marked set. Specimen A. measures in inches = 0·98 × 0·72.
499	351	3	Beautifully spotted set of 3 eggs, and was taken by W. McEnerny, Frank and Sid. W. Jackson, at Bong Bong Creek, Glen Ugie road, near Grafton, N.S.W., on the 27th of October, 1893. The nest was built in a narrow-leaved Apple tree (*Angophora lanceolata*), and contained also an egg of the Pallid Cuckoo (*Cuculus pallidus*). It was a nest of this species that induced me, during my very early ornithological days (1884), to carry a step-ladder every morning for a week, a distance of over 2 miles, in order to watch the progress of the building operations. I was at last rewarded with what I then imagined was a set of rare eggs. These Soldier Birds are often very troublesome to the ornithologist when he is patiently engaged watching the movements of some other rare species in the bush, and probably with a view to finding its nest. I have frequently been watching a bird for two or three hours, in order to try and locate its nest, when to my utmost disgust one or two Soldier Birds would suddenly fly up and sit on the lowermost limb above my head, and there, with their inquisitive attitude, would peer down at me while pouring forth their noisy "kar-kar-kar." To aggravate a person still further, they fight with and fly after your bird, and ultimately drive it away altogether, and the net result is that your hours of patient work have been absolutely lost. Specimen A. of the set under notice measures in inches = 1·01 × 0·71.
499	450	1	PALLID CUCKOO, *Cuculus pallidus*, Latham. One egg, taken with the above set of 3 Miner's eggs. It measures in inches = 0·96 × 0·68.
500	362	3	FRIAR BIRD OR LEATHER HEAD, *Philemon corniculatus*, Latham. (This bird is known to the aborigines of the Clarence River district as "Boo-go-wog-away.") Set of 3 eggs, which are the most elongated specimens I have yet seen of this species. Taken by J. Neale, Frank and Sid. W. Jackson, at Yellow Gully, near South Grafton, Clarence River, N.S.W., on the 23rd of October, 1892. The nest was built in a Bloodwood Eucalypt (*Eucalyptus corymbosa*), at an altitude of 30 feet, and was a beautiful structure swung from a horizontal fork at the extremity of a long thin limb. These noisy Leather Heads like to live in the gullies of the forests near water, where they build their neat suspended nests in the Apple trees (*Angophora*), at the ends of the branches which tend to droop willow-like down over the small stream of water below. They seldom visit the thick scrubs, and the only occasion on which I observed them therein was one season in the Clarence River district, when the Silky Oak (*Grevillea robusta*) and the Bean-ball trees (*Castanospermum australe*) were profusely covered with their honey-bearing blossoms, and where they congregated in great numbers. Specimen A. of this interesting clutch measures in inches = 1·56 × 0·88.
501	362	4	Set of 4 eggs, which are much shorter specimens than those of the latter set, and were taken by Frank and Sid. W. Jackson, at Shingley Flat, near South Grafton, N.S.W., on the 22nd of October, 1893. The nest was built in a Swamp Mahogany (*Eucalyptus robusta*). One egg of the clutch is larger and more rounded and swollen at the thick end than the others, and is of a lighter ground colour,

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			and resembles somewhat the egg of the Koel Cuckoo (*Eudynamis cyanocephala*), which I took from an Oriole's nest. (Data No. 544). See A. J. Campbell's book, page 587. This egg from the nest of the Friar Bird measures in inches = 1·23 × 0·90, and I fear it is too small to be a treasured egg of the Koel, as the one which was taken from the nest of the Oriole on the 31st of October, 1894, measures = 1·36 × 1·02. A specimen of the other 3 (Friar Bird's) eggs of this set under notice, measures = 1·22 × 0·82. The Koel Cuckoo, I may mention, is often very common during October, November, and December in the Clarence River district of N.S.W.
502	362	2	Set of 2 eggs, taken by Sid. W. Jackson, near South Grafton, N.S.W., on the 8th of November, 1898. Short specimens, with cloudy markings. Specimen A. measures in inches = 1·22 × 0·87.
503	362	2	Set of 2 eggs, which are long, pointed and very dark salmon coloured specimens. Taken by W. McEnerny and Frank T. A. Jackson, near South Grafton, N.S.W., on the 24th of October, 1897. Specimen A. measures = 1·26 × 0·80.
504	363	2	SILVERY-CROWNED FRIAR BIRD, *Philemon argenticeps*, Gould. Set of 2 eggs of this interesting species, which was taken by R. Hislop in the Bloomfield River district, North Queensland, on the 18th of December, 1895. These eggs are different to those of other members of the Friar Bird family, and more resemble those of the Harmonious Thrush if the markings were not so purplish-brown. It seems remarkable that the eggs of this bird should be so very different to those of the other four species. Specimen A. measures in inches = 1·22 × 0·88.
505	364	2	HELMETED FRIAR BIRD, *Philemon buceroides*, Swainson. Set of 2 eggs, taken by H. Barnard at Cape York, North Queensland, on the 14th of December, 1896. These eggs resemble small and dull spotless specimens of the common Friar Bird or Leather Head. Specimen A. measures = 1·13 × 0·85.
506	365	3	YELLOW-THROATED FRIAR BIRD, *Philemon citreogularis*, Gould. Set of 3 eggs, taken by Frank and Sid. W. Jackson, at Pilla Valley, north-east of Glen Ugie Peak, Clarence River, N.S.W., on the 4th of November, 1893. The nest was built in a narrow-leaved forest Apple tree (*Angophora lanceolata*), and placed at an altitude of 35 feet. The nest is a very scanty structure compared with that of the Common Friar Bird or Leather Head. We only took four clutches of the eggs altogether, and they varied from two to three for a sitting. The birds were never very plentiful, and the nests were only half the size of those of the common Friar Bird, and were often placed in the long drooping willow-like clusters of foliage of the latter tree, which frequently grows near the water courses. Specimen A. of this beautiful clutch measures in inches = 1·14 × 0·72.
507	366	3	LITTLE FRIAR BIRD, *Philemon sordidus*, Gould. Set of 3 eggs, which are much smaller and less richly marked than those of the latter set. Taken by E. Drew on the Nicholson River, Gulf of Carpentaria, North Queensland, on the 23rd of November, 1895. Specimen A. measures in inches = 1·02 × 0·74. Specimen B. measures = 1·03 × 0·73. Specimen C. measures = 0·99 × 0·72.
508	66	3	WHISTLING THRUSH, *Collyriocincla rectirostris*, J. and S. Set of 3 eggs, which are very large and heavily blotched specimens, and were taken by M. W. Harrison at Berriedale, Tasmania, on the 2nd of October, 1894. Specimen A. measures in inches = 1·22 × 0·86.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
509	66	3	Set of 3 eggs, which are not nearly so well marked as those of the latter set. Taken by M. W. Harrison at Glenorchy, Tasmania, on the 27th of September, 1899. Specimen A. measures in inches 1·13 × 0·87.
510	65	5	GREY HARMONIOUS THRUSH, *Collyriocincla harmonica*, Latham. Very large set of 5 eggs, taken by Frank and Sid. W. Jackson, at Clarenza, South Grafton, N.S.W., on the 28th of August, 1892. The nest was placed only four feet from the ground, in the hollow portion of an Ironbark tree (*Eucalyptus paniculata*). Three to four eggs usually form the full complement for a sitting, and five are very rarely found. The nests I have often found placed as high as seventy feet in the forests, and at Manly, near Sydney, I have frequently seen them built only a few feet from the ground; they are constructed of bark and neatly lined with roots, and are placed in the thick fork of a tree, but I have discovered them more often in a hollow spout or limb. This species differs from many other of our Australian birds by reason of the sober colour of its plumage, which is inconspicuous and little likely to attract attention. It is not a gregarious species, nor does it associate with other birds, living for the most part in couples, which presumably pair for life, and constantly keep together, subsisting upon the insects and other food to be found in the vicinity of the Eucalyptus forests, which are their favourite haunts. The note of this dainty creature is clear and harmonious, and loudly rings and re-echoes through the wattle-scented gullies of the forest. On a fine spring morning in August, when the birds are happily engaged at their nest building, it is almost impossible, even to the most disinterested, to avoid experiencing some delight in listening to these merry heralds of glorious bird life. I know a favourable time has then arrived, and I always hope, aided by the season, to turn the thoughts of others whose finer sympathies incline to nature's wonders, and who enjoy listening to the history of some of the dainty living creatures around us, that so many greatly fail to understand and protect. There are occasions when bird life is thrust upon the casual notice of some of us, and periods when it is dormant, still many never give it a single thought; and, though the scrubs and forests, and rank water courses shelter birds of a few hundred or more kinds, yet they are often passed by without any sign of curiosity or interest. Specimen A. measures = 1·13 × 0·80.
511	67	2	BROWN THRUSH, *Collyriocincla brunnea*, Gould. Set of 2 eggs, taken from a nest built in the thick upright fork of a dead tree in the Nicholson River district of north-west Queensland. Taken by E. Drew on the 19th of November, 1895. Specimen A. measures in inches = 1·24 × 0·82.
512	68	3	BUFF-BELLIED THRUSH, *Collyriocincla rufiventris*, Gould. Set of 3 eggs, taken in the Blackwood River district, south-west Australia, by S. Hall, on the 31st of July, 1895. The eggs are very heavily blotched at the larger ends. Specimen A. measures in inches 1·13 × 0·81.
513	71	3	RUFOUS-BREASTED THRUSH, *Pinarolestes rufigaster*, Gould. Very handsomely blotched set of 3 eggs, taken by Sid. W. Jackson, in Alipou Scrub, South Grafton, Clarence River, N.S.W., on the 2nd of December, 1894. The nest was built in a labyrinth of vines and Scrub Cane (*Flagellaria indica*), situated 12 feet from the ground. I found these birds' nests frequently built in a mass of *Lantana* bush, growing over the tops of high stumps in the above scrub. They are, as a rule, very difficult to find, unless the birds are noticed going to or coming from them. Specimen A. of this fine clutch measures in inches = 1·03 × 0·77.
514	71	3	Set of 3 eggs, which are pearly-white specimens and almost devoid of markings. There is a great contrast between this and the previous set (No. 513), and a person not conversant with our oological studies would naturally consider this clutch as belonging to a distinct species. Specimens A. and B.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			have a few tiny specks, needle-point size, at the larger ends, and specimen C. has a scattered zone of minute dark brown spots also at the larger end, and resembles the egg of *Ptilotis lewini*. This is the only plain clutch I have seen of these eggs. This set was also taken in Alipou Scrub, South Grafton, N.S.W., and was found on the 1st of November, 1893, by Frank and Sid. W. Jackson. The nest, as usual, was a beautiful rustic structure, composed of dead leaves, spiders' silk cocoons, and thin vines, etc., and the inner part of it had two leaves of the Tamarind tree (*Diploglottis Cunninghamii*) neatly worked around the sides, and finally lined with thin roots. These birds confine themselves to the very dense parts of the scrubs, where it is almost impossible to penetrate. Their note resembles very much that of the Grey Harmonious Thrush. Specimen A. measures in inches = 1·07 × 0·73.
515	72	2	LESSER RUFOUS-BREASTED THRUSH, *Pinarolestes parvissima*, Gould. Set of 2 eggs, taken by T. Williams, near Cairns, North Queensland, on the 29th of September, 1897. The eggs are very like those of the latter species, only they are a little smaller. Specimen A. measures in inches = 0·99 × 0·74.
516	70	1	LITTLE THRUSH, *Pinarolestes parvulus*, Gould. One egg, which is almost devoid of markings, and is a small malformed specimen, was taken from the oviduct of a bird shot at Port Essington, North Australia, during October of 1896, by E. Drew. It only measures = 0·94 × 0·63.
517	74	3	BLACK-FACED CUCKOO SHRIKE, *Graucalus melanops*, Latham. Handsome clutch of 3 eggs, of the dark green variety, taken at Ti Tree Creek, South Grafton, N.S.W., by Frank and Sid. W. Jackson, on the 4th of November, 1893. The nest was placed in an Ironbark Eucalypt (*Eucalyptus paniculata*), at an altitude of 50 feet. The first eggs which I saw belonging to this species were taken by A. Buckley, at Bundaberg, Queensland, in the bush near our home in 1881. Specimen A. measures in inches = 1·25 × 0·90.
518	74	3	Set of 3 eggs, of the dark yellowish-brown variety, taken by Frank and Sid. W. Jackson, at Clarenza, South Grafton, N.S.W., on the 22nd of December, 1892. The nest was placed at an elevation of over 60 feet, in an Ironbark Eucalypt, and was exceedingly difficult to approach. Specimen A. measures = 1·32 × 0·91.
			(For want of space the following set has been placed in drawer N.)
519	74	3	Handsome clutch of 3 eggs, which are of a beautiful light green. Specimen A. has a zone of bold blotches at the larger end, while B. and C. have them scattered more evenly over the whole surface. This is a splendid set, and quite different to all others we have collected or seen in any collection. The nest was placed in a Swamp Oak (*Casuarina glauca*), at an altitude of 25 feet. Taken near "Dallinga," South Grafton, N.S.W., by A. Amos, Frank and Sid. W. Jackson, on the 30th of October, 1893 This set concludes this fine series of eggs of the Black-faced Cuckoo Shrike. Specimen A. measures = 1·27 × 0·84.
520	73	3	GROUND CUCKOO SHRIKE, *Pteropodocys phasianella*, Gould. Beautiful set of 3 eggs, which very much resemble polished greenstone. Taken near Cunnamulla, south-west Queensland, by H. Scotney, on the 6th of October, 1897. I have never had the pleasure of observing this terrestrial species in its natural haunts. Specimen A. measures = 1·23 × 0·88.
521	75	3	SMALL-BILLED CUCKOO SHRIKE, *Graucalus parvirostris*, Gould. Set of 3 eggs, taken by A. E. Brent at Glenorchy, Tasmania, on the 8th of October, 1899. Specimen A. measures in inches = 1·22 × 0·88.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
522	76	2

WHITE-BELLIED CUCKOO SHRIKE,

Graucalus hypoleucus, Gould.

Set of 2 eggs, taken by H. Barnard near Rockhampton, Queensland, on the 9th of October, 1892. Specimen A. measures in inches = 1·07 × 0·82.

523	77	2

LITTLE CUCKOO SHRIKE,

Graucalus mentalis, V. and H.

Set of 2 eggs, which are well marked specimens, and were taken by Geo. Frisch and Sid. W. Jackson, at the South Pine, north of Brisbane, Q., on the 11th of September, 1885. This set has retained the colour wonderfully well during the twenty-two years it has been in the collection. In the Clarence River district of New South Wales, my brother and I found many nests of this bird, but we were always most unfortunate in finding the eggs on the point of hatching, and in other cases the birds left the nests which we found being built. I have seen this species deliberately pull the nest to pieces while the eggs were being "scooped" from it, and if a new nest was found one week nearly ready for eggs, it would be discovered on the ground under the tree next visit quite destroyed. We found *every* nest built in a Bloodwood Eucalypt (*Eucalyptus corymbosa*). Specimen A. measures = 1·09 × 0·80.

524	78	1

BARRED CUCKOO SHRIKE,

Graucalus lineatus, Swainson.

One egg, which is a small specimen, and was taken from a nest by a boy possessed of the usual primitive method of preserving, and was blown at the ends. The nest from which it was taken had been watched for several days by W. McEnerny and myself, and we were very sanguine about getting a clutch of eggs in it; but the itinerant school boy, quite unconscious of our find, found the nest and robbed it of the above rare egg, which he afterwards very kindly handed over to me. It was taken on the 16th of December, 1899, and the nest was built in a Sassafras tree (*Doryphora sassafras*), being placed 18 feet from the ground, in rather a conspicuous position, on a horizontal branch leaning out over the edge of a track or road, near J. J. Garvan's property at St. Helena, Byron Bay, N.S.W. The egg is rather a small specimen, and measures = 1·11 × 0·77. We found another nest at the foot of Cooper's Shoot, Byron Bay, on the 22nd of December, 1899, but it contained two young birds. This beautiful bird has a very remarkable, yet sweet musical note. They were plentiful in the rich scrubs extending from Booyong to Byron Bay, and kept well out of the range of my gun, frequenting the very tops of the tall Booyong (*Tarrietia actinophylla*) and other large scrub trees. However, I secured a fine pair of the birds, with which I was satisfied, but their eggs would have been far more acceptable.

525	79	1

CATERPILLAR CATCHER, OR JARDINE'S CAMPEPHAGA,

Edoliisoma tenuirostre, Jardine. *Campephaga jardinii*, Rüppell.

One egg, which forms the full sitting, and is a handsome specimen, and was the *first* egg of this species taken in New South Wales; however, there has been no record as far as I am aware of one having been found previous to this. The nest was placed in a giant Ironbark Eucalypt (*Eucalyptus siderophloia*), in a fork at the extremity of a very long horizontal branch, and it was with the greatest difficulty that I succeeded in taking the rare egg from the nest. With a strong rope over a hundred and thirty feet long I was hauled up slowly, and ultimately perched at an elevation of 85 feet, level with the nest, and with a scoop-fitted rod 22 feet long took the egg from it, but only after a few hours' patient and careful manœuvring. (See accompanying illustrations, pages 93 and 94.) The nest being a very flat structure, and placed such a distance away from me, was obviously most difficult to scoop, and the least jar of the scoop rod would have tossed the egg out. It is a beautifully marked specimen, the ground colour being of a pale greenish-white, and is boldly blotched all over with dark umber, and a few markings of slate. It measures in inches = 1·25 × 0·85. From the time I started to climb up to the nest till I was again safely landed on *terra firma*, nearly four hours had expired, in the sweltering heat; it was a difficult and very awkward climb, and unfortunately we did not have the "climbing ladder" with us on this important occasion. It was taken in the Ironbark forest, at the

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

base of Glen Ugie Peak, 14 miles south-east of Grafton, Clarence River, N.S.W., on the 21st of November, 1897, by L. Vesper and myself. This bird is a most interesting species, and one which is rarely observed by persons other than those who have closely studied the ornithology of Australia. It is exceedingly shy, and its note is so very unlike that of a bird that the casual observer hearing it would simply pass it as the pulsating buzz of a large locust (*Cicada*), the noisy note of which is so well known to nearly all Australians during the summer months. My brother and I heard the buzz-like note in the bush at Glen Ugie Peak, each season for three years in succession, before we were convinced of the fact that it was made by a bird. The buzzing sound, and also a short note resembling "pit-pit-pit-pit," are only made while the bird is sitting in a tree or feeding; but when flying from tree to tree, or suddenly disturbed, the peculiar noisy and excited "tweet-tweet-tweet," and cluck-like notes are uttered. (See A. J. Campbell's book on "Nests and Eggs of Australian Birds," page 102, for my notes on this shy species). I found a nest and egg of this bird in the bush between Roseville and the Lane Cove River near Sydney, on the 10th of December, 1906, but only after I had followed and watched the birds for over twenty-one hours, during which period I climbed up and down the same rocky ridges and gullies dozens of times, and nearly wore out a pair of boots. The nest was placed 36 feet from the ground, in a Bloodwood Eucalypt (*Eucalyptus corymbosa*). These birds seem to confine themselves to the tall timbers of the coast, and I have never known them go inland. They visit us from the north during the end of September or early in October, and take their departure about the middle of February. In the Clarence River district we found the nests nearly always built in Ironbark or Bloodwood Eucalypts, and two or three times the birds removed their partially made nest after it was discovered. The female occasionally makes a buzzing noise like the male, but I have only noticed it during wet weather and when I was taking specimen data No. 527. The most usual note of the female is a cluck-like sound, similar to that of the male, but it is very seldom made, and that is one reason why the female is so difficult to catch sight of during the breeding season. The last nest and egg which I took of this species in the Clarence River district, was on the 9th of February, 1898, and the following is an extract from my note book *re* same:—"I had not long entered Wall's gully when the loud cluck-like notes of the male bird came to my ears, followed by his peculiar buzzing noise. I tracked him for over two hours, and was just giving up all hopes of finding the nest, when all at once he alighted in an Ironbark Eucalypt, close to the clump of small gum saplings in which I was hiding. He flew down to a horizontal forked limb, with a caterpillar in his beak, and, in a few seconds, ran along the limb towards the fork, looking carefully around every few steps, and finally reaching the fork, dropped the caterpillar and flew away. On going over to the tree, from underneath, and with the aid of the field glasses, I could see a slight sign of a nest, and the tail of the hen bird sticking a little over the side. I had no climbing paraphernalia with me, and being alone I had just to scramble the tree as best I could, and a difficult and uncomfortable task it was, owing to the high climb (60 feet), and the roughness of the bark. However, I at last reached the nest, and took from it one beautiful fresh egg, which now graces another collection. While sitting down resting after my climb, and examining my torn and bleeding arms, to my surprise I found both birds (♂ and ♀) busily engaged pulling the nest

The white cross shows Sid. W. Jackson up at the nest of the Caterpillar Catcher, at an altitude of 85 feet. The small nest is in the fork below the black cross.

Loc., Glen Ugie Peak, Clarence River, N S.W.

(*See data No. 525, page 92.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

to pieces." The male bird is of a bluish-grey colour, the female being brown. I noticed that the food of these birds consists principally of Stick and Leaf mimicking insects (*Phasmatidæ*), also Praying Mantis insects (*Mantidæ*) and caterpillars, all of which they collect on the young foliage of the Eucalyptus trees. The late John Gould, writing on this species in 1865, states that it is far less common in New South Wales than it is at Port Essington, North Australia, where the late J. Gilbert collected the following particulars respecting it :—" This bird is extremely shy and retiring in its habits. It generally inhabits the topmost branches of the loftiest and most thickly-foliaged trees growing in the immediate vicinity of swamps. Its note is altogether different from that of any other species of the genus, being a harsh, grating, buzzing tone, repeated rather rapidly about a dozen times in succession, followed by a lengthened interval. It appears to be a solitary species, as I never saw more than one at a time." The nests are very like those of the *Graucali*. In the Clarence River district my brother and I noticed that the birds return to the same locality every season.

NEST AND EGG OF THE CATERPILLAR CATCHER.
(About half of the natural size.)
Loc., Glen Ugie Peak, Clarence River, N.S.W.
(*See data No. 525, page 92.*)

526	70	1	Clutch of 1 egg, which is of a dirty yellowish-white ground colour, spotted and blotched all over with umber and light slate markings, and is quite a different variety compared with the latter specimen (No. 525). It was taken by myself, at Yellow Gully, near South Grafton, N.S.W., at a quarter to five on Christmas morning, 1897, after being awakened by a male Caterpillar Catcher making his buzzing-like call in a tree leaning over my tent. Half dressed I hurried off, leaving my companions in the "land of dreams," and had only walked about 50 paces from the tent when I found the female sitting on a nest, 40 feet from the ground, in a Bloodwood Eucalypt (*Eucalyptus corymbosa*). I climbed up, and got a splendid egg from it, then returned to camp, aroused my sleeping mates, and astonished them with my find. I partook of a hearty breakfast that morning. The egg measures in inches = 1·24 × 0·82, and it is a narrower and more pointed specimen than the last one described.
527	70	1	Set of 1 egg, which is very heavily and beautifully blotched, on a very pale greenish-white ground colour, but unfortunately is a small round malformed specimen, which contained no yolk, and only

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

measures = 0·73 × 0·60. The nest from which I took it was again placed in a Bloodwood Eucalypt (*Eucalyptus corymbosa*), and at the extremity of a long horizontal limb, while my only chance to scoop it was by climbing a tall Box Eucalypt (*Eucalyptus melliodora*) sapling that stood not far away. This was accomplished with very great difficulty during teeming rain, and when I got up 50 feet, and nearly level with the nest, I scooped it from the other tree, at a distance of 12 feet, but not before coaxing the hen for nearly ten minutes to quit the nest. The climb and its attendant happenings were, I think, worthy of a normal and fully developed egg. It was taken by Frank and Sid. W. Jackson, on the side of a ridge at the foot of Yellow Gully, South Grafton, N.S.W., on the 9th of January, 1898. In Victoria these birds build lower down in the trees than they do further north. During the season 1898 we found in the Clarence River district of N.S.W., in all eight nests, and with an egg in each. They vary considerably in their size, shape, and the general ground colour and disposition of the markings.

Sid. W. Jackson up at the nest of a Caterpillar Catcher. The nest is in the tree on the right, just a little below the cross.

Loc., Yellow Gully, South Grafton, Clarence River, N.S.W.

(See data No. 527.)

528 81 1

PIED CATERPILLAR CATCHER,

Lalage leucomelæna, V. and H.

Clutch of 1 egg, which forms the full sitting, and is the second specimen of its kind ever taken. The first authenti-

NEST AND EGG OF THE PIED CATERPILLAR CATCHER.
(More than half of the natural size).
Loc., Alipou Scrub, South Grafton, Clarence River, N.S.W.
(See data No. 528.)

cated nest and egg of this species was found by R. D. Fitzgerald at Ballina, at the mouth of the Richmond River, New South Wales, on the 4th of November, 1887. This egg under notice was taken in Alipou Scrub, South Grafton, New South Wales, on the 9th of December, 1894, by W. McEnerny, Jno. McEnerny, Frank and Sid. W. Jackson. The nest was built on the horizontal forked branch of a Rosewood tree (*Dysoxylon fraserianum*), near the edge of the scrub, and was placed 25 feet from the ground. It resembles a very small one of the Black-faced Cuckoo Shrike (*Graucalus melanops*), and measures 2½ inches across, over all, and 1½ inches across inside diameter, and is a very shallow structure. There is not sufficient room for two eggs in the nest, as the accompanying illustration clearly shows. The egg is of a light apple-green ground colour, being spotted and blotched all over, and more so at the larger end, with umber, and pale slate markings. I loaned the nest and egg to the Australian Museum

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

in Sydney, during March of 1896, and from them descriptions were taken. We have frequently seen and heard these birds about Alipou scrub and other parts of the Clarence River, year after year, but only succeeded in finding the one nest and egg. The note of the bird is a peculiar rattling or rolling noise, somewhat like that produced by a railway guard's whistle, one which has the little ball or pea inside, causing the quivering sound. The specimen measures in inches = 0·97 × 0·68.

520 — 3

WHITE-SHOULDERED CATERPILLAR EATER,

Lalage tricolor, Swainson.

Perfect set of 3 eggs, which closely resemble the latter specimen, except that they are much smaller, and more pointed at the narrow ends. The ground colour is of a pale apple-green, spotted all over, and particularly at the larger ends, with reddish-brown and dull slate. Taken by Sid. W. Jackson, at Camden, New South Wales, on the 10th of November, 1900. The nest was built in an Ironbark Eucalypt (*Eucalyptus siderophloia*), at a height of only 15 feet. Specimen A. measures in inches = 0·80 × 0·61.

53 — 3

Set of 3 eggs, which are of the very dark reddish-brown type, and so different to those of the latter set, that no person would think it possible such a distinct variation could exist. This is the darkest set we have ever seen. It was taken at Cabbage Tree Creek, near Sandgate, Brisbane, Q., by Frank and Sid. W. Jackson, on October the 29th, 1886. The bird is well known in the country as the Pee Wee Lark, and its note is rather like that of the Brown Flycatcher.

Specimen A. measures = 0·78 × 0·62.

NESTING PARTY AT GLEN UGIE PEAK,
Clarence River, N.S.W.
1897.

Drawer N.

531 — 419 — 4

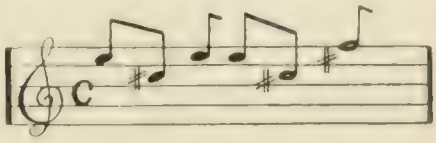
PITTA OR DRAGOON BIRD,

Pitta strepitans, Temminck.

Handsome clutch of 4 eggs, and, as is generally the case, one specimen is not nearly so heavily spotted as the others. The nest was placed about 50 feet in from the edge of the scrub, and was built up against the roots of a Silky Oak (*Grevillea robusta*), near an old dead stump. It was taken on the 16th of October, 1899, by W. McEnerny and Sid. W. Jackson, at Booyong scrubs, near Lismore,

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

Richmond River, N.S.W. The note of this handsome bird resembles somewhat "I lost my whip," the last note being sounded the highest thus :—



Sometimes it is uttered slowly, but more often rapidly, which I frequently noticed just a little after sunset, when the birds would call to each other from distant parts of the scrub. The nest is dome shaped, and constructed of dead leaves, sticks, moss, etc., being usually placed on the ground up against the roots of a tree or old stump in the scrub. I took a splendid photograph of the nest, from which the set of eggs under notice was taken, but regret to state the negative was accidentally broken. The actions of the Pitta are very graceful, and, like the Lyre Bird, it is a great runner, getting through the fallen timbers and tangled scrub with marvellous rapidity. To find small piles of broken land shells (snails) with a stone beside each, is sufficient proof that Mr. and Mrs. Pitta are not far away. The snails are collected and carried to the "feeding ground," where the bird, by holding them in the bill, manipulates and taps them against the stone, and, when broken to suit her requirements, devours the dainty morsel from the inside. I saw many piles of these broken shells in the Booyong scrubs in 1899, with a stone always beside each, and have frequently heard the "tap-tap-tap" on it as the birds were busy feeding. Specimen A. measures in inches = 1·25 × 0·92.

532 420 2

LESSER PITTA,

Pitta strepitans simillima, Gould.

Pair of eggs, taken from a scrub north of Cairns, North Queensland, on the 4th of November, 1889. (Received from the Queensland Museum). Specimen A. measures = 1·19 × 0·95.

533 422 2

RAINBOW PITTA,

Pitta iris, Gould.

Pair of eggs, which are much smaller and more heavily blotched than those of the two last species. Taken by L. Dumas in the cane beds, at the north-west of Australia, on the 20th of January, 1902. This handsome bird is the smallest of the Australian Pittas. Specimen A. measures in inches = 1·04 × 0·81.

534 206 2

SPOTTED GROUND BIRD,

Cinclosoma punctatum, Latham.

Set of 2 eggs, taken near the Little Murray River, Don Dorrigo, New South Wales, on the 14th of October, 1898. The nest was placed among ferns, under a projecting rock near the river. Taken by Frank and Sid. W. Jackson. Specimen A. measures = 1·31 × 0·89.

535 207 2

CHESTNUT-BACKED GROUND BIRD,

Cinclosoma castanonotum, Gould.

Set of 2 eggs, taken by W. Hills, near Wangaratta, Victoria, during September of 1897, and bird identified. The nest was placed in the partially burnt-out root-hole of a tree. Specimen A. measures = 1·29 × 0·85.

The white cross denotes the nest of the Ground Thrush.
Loc., Don Dorrigo Scrubs, N.S.W.
(*See data No. 536.*)

536 155 2

GROUND THRUSH,

Geocichla lunulata, Latham.

Set of 2 eggs, taken by Frank and Sid. W. Jackson in the scrubs at Don Dorrigo, South of the Clarence River, N.S.W., on the 10th of October, 1898. The nest, which was a cup-shaped structure,

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			was composed of moss, and built upon ferns growing on the side of a scrub tree. The cross in the photograph shows the position of the nest among the luxuriant growth of ferns, etc., on the trunk of the tree. Specimen A. measures = 1·21 × 0·88.
537	156	2	LARGE-BILLED GROUND THRUSH, *Geocichla macrorhyncha*, Gould. Set of 2 eggs, taken by M. W. Harrison at Berriedale, Tasmania, on the 6th of September, 1896. Specimen A. measures = 1·29 × 0·88.
538	157	2	RUSSET GROUND THRUSH, *Geocichla heinii*, Cabanis. Set of 2 eggs, which are rather different to those of the two latter species, being of a *pale green* ground colour, and *sparingly* marked and blotched with dull and rich purplish-brown. Taken at Booyong Scrubs, 14 miles north-east of Lismore, Richmond River, New South Wales, on the 15th of November, 1899, by W. McEnerny and Sid. W. Jackson. The nest is a beautiful cup-shaped structure, composed of green moss (*Hypnum*), and was picturesquely placed on top of a Stag-horn Fern (*Platycerium grande*), which was growing on the side of a Booyong tree (*Tarrietia actinophylla*). The shell is exceedingly fragile. Specimen A. measures = 1·14 × 0·88.
539	61	3	FIG BIRD, *Sphecotheres maxillaris*, Latham. Beautiful clutch of 3 eggs, which are very large and well blotched specimens. Taken in Alipou Scrub, South Grafton, Clarence River, New South Wales, on the 16th of December, 1894, by Frank and Sid. W. Jackson. The nest was built in a tall Lilly Pilly tree (*Eugenia Smithii*), and placed at an altitude of nearly 30 feet, at the very extremity of a long thin branch, which rendered it difficult to scoop the eggs from it. These birds were very plentiful about Grafton during season 1894, and many of them actually built their nests in the Camphor Laurel trees (*Camphora officinarum*) growing in the streets of the city. During my last visit to Brisbane, in September of 1906, I found nests of this species built in the trees growing in the parks and gardens there. The eggs vary much in their ground colouring and general markings. We took nine clutches of the eggs near Grafton, and no two sets were alike. The eggs can be seen through the nest from below. (See A. J. Campbell's book, at foot of page 83). The note of this bird resembles "chick-ock, chee-koy." Specimen A. measures = 1·43 × 0·97.

NEST AND EGGS OF THE FIG BIRD.
(About one third of the natural size.)
Loc., South Grafton, Clarence River, N.S.W.
(*See data No. 510, page 99.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
540	61	3	Set of 3 eggs, which are quite differently marked to those of the latter set, and resemble very much the eggs of the Grey Butcher Bird (*Cracticus destructor*). Taken by A. Amos, D. Hawthorne, and Frank T. A. Jackson, at South Grafton, N.S.W., on the 2nd of December, 1894. The nest was built in a Red Cedar tree (*Cedrela australis*), at an altitude of 39 feet. Specimen A. measures = 1·25 × 0·87.
541	62	3	YELLOW-BELLIED FIG BIRD, *Sphecotheres flaviventris*, Gould. Set of 3 eggs, which are of the very pale green variety, and are heavily blotched. Like the latter species, the eggs of this bird vary considerably in their ground colouring and markings. Taken by H. Barnard, at Cape York, Queensland, on the 7th of November, 1896. Specimen A. measures = 1·26 × 0·78.
542	62	3	Set of 3 eggs, which are of the salmon-colour variety, being heavily blotched, and quite unlike the latter set. It was taken, in the Bloomfield River district of North Queensland, by a collector engaged by C. French, jnr., on the 27th of November, 1895. I have seen these birds as far south as Grafton, N.S.W., in January of 1896, and at Byron Bay, N.S.W., in January of 1900. Specimen A. measures 1·22 × 0·87.
543	60	2	ORIOLE, *Oriolus viridis*, Latham. Handsome and very elongated clutch of 2 eggs, with a very light ground colour. Their shape is peculiar, because, although long, they are blunt and rounded at each end. Taken on the 27th of November, 1892, at Yellow Gully, South Grafton, N.S.W., by Jas. Neale, Frank and Sid. W. Jackson. The nest was a beautiful structure, and was placed in a Mahogany tree (*Eucalyptus robusta*) at an altitude of 26 feet. It resembles very much that of the Leather Head, but is often much more neatly constructed. This species confines itself to the trees growing near water courses. Specimen A. measures in inches = 1·53 × 0·88.
544	60	3	This is the historical set of 3 eggs with which the first authenticated egg of the Koel Cuckoo (*Eudynamis cyanocephala*) was taken. Specimen A. of the clutch measures in inches = 1·40 × 1·01. For my notes see also A. J. Campbell's book, pages 82 and 587, and illustration; also, coloured figure on plate 17. The eggs of this set are much shorter and stouter specimens compared with those of clutch No. 543, and the ground colour is of a very much darker cream. On the afternoon of the 31st of October, 1894, I left South Grafton and went into the bush, in hopes of securing some special beetles of the *Carabidæ* family, for a friend collector, but before I had gone very far my attention was directed to a pair of Koels (♂ and ♀), by the great noise they were making in the gully. I went over and noticed the birds fly from a Forest Apple tree (*Angophora subvelutina*) into another beside it, and found the female Koel on a limb near an Oriole's nest. This looked to me suspicious, and at the same time very encouraging, so I climbed up and carefully "mirrored" the nest, and found it to contain only 3 eggs of the Oriole. I came down again and rested in the shade, and with an anxious mind and palpitating heart, watched the female Koel as she chased the Orioles. Shortly the male Koel flew away, and the female went on the Oriole's nest. I did not move, although I was most uncomfortable through the cramped way in which I was sitting, and after waiting for fifteen minutes, I got up and hit the tree to frighten the Koel off the nest, but she would not go. I then felt thoroughly convinced she was laying, and that my patience would be rewarded; so after fully another fifteen or twenty minutes, I got up and hit the tree again, this time with a tomahawk, and in a few seconds off she flew, accompanied by the male, who had returned in the meantime. I was quite delighted at this, and once more climbed the tree, and found the nest contained four eggs—three of the Oriole, and one of the Koel Cuckoo. In scooping the eggs from the nest, the Koel's egg got a little dented on the side, but has since been successfully repaired. See accompanying illustrations, pages 100, 101. The three Oriole's eggs measure—Specimen A. = 1·40 × 1·01; Specimen B. = 1·34 × 0·97; Specimen C. = 1·39 × 1·01. The Koel's egg measures = 1·36 × 1·02.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs
544	460	1

KOEL CUCKOO.

Eudynamis cyanocephala, Latham.

One egg, taken with the latter set of 3 Oriole's eggs, at South Grafton, Clarence River, N.S.W., by Sid. W. Jackson, on the 31st of October, 1894. The particulars *re* the discovery are given above. This rare specimen was forwarded to the Australian Museum, in Sydney, for inspection, and was described in the "Proceedings of the Linnean Society of New South Wales," in 1895, concluding with the following remark :—"It will be observed that the egg of Flinder's Cuckoo (Koel) is the same size

NEST AND CLUTCH OF THREE EGGS OF THE ORIOLE, AND ONE EGG OF THE KOEL CUCKOO.
(About half of the natural size.)
Loc., South Grafton, Clarence River, N.S.W.
(*See data No. 544, page 99.*)

(about) as those of the Green-backed Oriole, although, as a rule, the eggs of Australian Cuckoos are larger than those of the birds in whose nests they are deposited. In the choice of a foster-parent for its young, Flinder's Cuckoo has, however, exercised great discrimination in selecting a species that, like itself, depends entirely on fruits and berries for its subsistence during the spring and summer months." The general note of the Koel is a real coo-ee like sound, that may be heard both night and day, and it is familiarly known in the country districts as the "Coo-ee Bird," which name it has undoubtedly received on account of its peculiar note. The male is of a beautiful rich glossy black,

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

and has red eyes, while the female is grey with a whitish breast, mottled with scales of black. During October of 1895 my brother and I hunted a Koel (♀) from the nest of the Babbler (*Pomatorhinus*), on two occasions, near South Grafton, N.S.W. The eggs of this Cuckoo must be plentiful some seasons in the Clarence River district, as the birds are often very numerous there during October, November

RARE EGG OF THE KOEL CUCKOO.
(Natural size).
(*See data No. 541 page 100*).

and December. Their eggs resemble very much some specimens of those laid by the Leather Head or Friar Bird.

545 58 2

NORTHERN ORIOLE,
Oriolus affinis, Gould.

Set of 2 eggs, taken in the Bloomfield River district, North Queensland, by collector engaged by C. French, jnr., on 26th December, 1895. These eggs are a little different to those of the New South Wales species. Specimen A. measures = 1·30 × 0·96.

546 59 2

YELLOW ORIOLE,
Oriolus flavicinctus, King.

Set of 2 eggs, taken by H. Barnard, at Cape York, North Queensland, on January 3rd, 1897. Specimen A. measures in inches = 1·15 × 0·87, and is a darker and less pointed egg than specimen B., yet they are both from the very same nest, and taken together. These are the smallest eggs of the Oriole family.

547 181 3

ROCK WARBLER,
Origma rubricata, Latham.

Set of 3 pearly white eggs, taken by Sid. W. Jackson, in a cave at the South-west Arm, Port Hacking, south of Sydney, on the 26th of September, 1903. The nest, which also contained an egg of the Fan-tailed Cuckoo, was the usual bleached looking dome-shaped structure, and measured 18 by 6 inches, and was composed principally of fibrous roots, bark, leaves and

NEST OF THE ROCK WARBLER,
Suspended from the roof of a cave.
(About one quarter of the natural size.)
Loc., Port Hacking, near Sydney.
(*See data No. 547.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

cobwebs matted together; also, large quantities of a dried narrow marine phanerogamous plant, which is known as Sea Grass or Wrack (*Zostera marina*), and may frequently be found growing in most of the shallow saline waters. It was suspended from a small ledge of rock, on the sloping roof of the cave, and to which it had been very securely fastened with glutinous cobwebs, etc. I had great difficulty in taking the accompanying photograph of it, on account of it being built in rather a dark place, and the wind caused the nest to move for a considerable time before I finally succeeded in making my exposure, which was naturally a very long one, and I was obliged to use large white sheets in order to reflect sufficient light into the cave. I have found these nests built in quite a number of different positions, and one at Port Hacking during September of 1903, was suspended from the roof of a hollow rock, and at high tide the water was only three inches from the bottom or tail end of it. I have known the nests also to be built in caves only a few yards from the ocean, on the rocky headlands near Sydney. It was during August, of season 1905, that I had the pleasure of inspecting one of them at Manly, near Sydney, which the birds had built in a most extraordinary position, and it was actually suspended from the ridge pole of a camp, where it dangled down over the bunks. The camp party would not allow any person to molest their welcome little visitors, and they went on building, laid a sitting of eggs, and ultimately reared their young; the continual traffic in and out of the camp, and the general noise and bustle of the camp party did not in any way deter them from building in the strange spot they had selected. As a rule these birds are very shy and solitary little creatures, usually frequenting rocky gullies and inaccessible ravines and places away from all habitation. I have only once noticed one perch in a tree, and they appear to be quite terrestrial in their habits, and may frequently be seen hopping over the ground and large moss-covered rocks in search of food. Their ordinary note, which is a shrill and rapid little chirp, is not unlike that of the Spine-tailed Log Runner (*Orthonyx*) of the northern scrubs, and also that of the White-fronted Scrub Wren (*Sericornis*), and is often kept up for a considerable time while the birds are engaged feeding; and when calling to one another from distant parts of the gullies, they give a sharp loud note resembling "dee-dee, dee-dee, dee-dee," and at other times they utter "tid-ed-ee, tid-ed-ee, tid-ed-ee, tid-ed-ee." This species is also known as the "Cataract Bird," and I think this appellation is more appropriate, as the birds are frequently found about the small waterfalls in the ravines, and on several occasions I have found their nests in caves in proximity to these tumbling waters. I noticed that they sometimes take nearly six weeks from the time they start to build the nest, until the eggs are laid in it. In localities where the gullies are well shaded with scrub, these birds often decorate the nests with green Moss (*Meteorium*), which makes them closely resemble those of the Large-billed Scrub Wren (*Sericornis*), and strange to say the *albino* eggs of the latter species (see data No. 379) resemble in every respect those of the Rock Warbler. All these Scrub Wrens build dome-shaped nests, with a small opening on the side, and most of which are suspended from the extremities of long branches of trees and vines in the scrubs, the eggs being chocolate coloured, and sometimes they are very dark. The Rock Warbler, nevertheless, deposits snow white eggs. Why? The Cuckoo which places its egg in the nest of the Rock Warbler is the same species as that which lays in the nests of the Scrub Wrens, so the eggs of the latter being dark coloured, and more difficult to see in the covered in nest, have not by any means been instrumental in deterring the Cuckoos from laying in them. The Rock Warbler is a stationary species, and remains with "us" in New South Wales throughout the whole year. It is plentiful within a radius of sixty miles of Sydney, and has been observed as far west as Jenolan Caves, and south to the Victorian border, and its northern limit is supposed to extend as far as the southern portions of Queensland, but I have never seen it north of Newcastle, N.S.W. The Port Jackson district is the stronghold of this interesting species. Specimen A. of the set of eggs under notice measures = 0·81 × 0·62.

547 451 1

FAN-TAILED CUCKOO,
Cacomantis flabelliformis, Latham.

This Cuckoo's egg was taken from the nest with the above set of 3 Rock Warbler's eggs. It is interesting here to note that this egg is only one point longer, and three points narrower, than specimen A. of those of the foster parents. It measures = 0·82 × 0·59.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
547A	181	3

ROCK WARBLER,

Origma rubricata, Latham.

Set of 3 eggs, which were quite fresh, and were taken on the 4th of August, 1907, by W. Humphries, Frank D. and Sid. W. Jackson, from a nest which had been suspended from the flat roof of a dark cave, which faced a small cataract in Blue Gum gully, west of Chatswood, near Sydney. In company with J. W. Dawson I found this nest getting built on the 30th of June, 1907, so that really it took the birds over 36 days to complete it, and lay the complement of eggs. Blue Gum gully is a wild and rugged region, and with its large sandstone boulders everywhere, and its scrubby dells and precipitous cliffs, forms the true haunt of the Rock Warbler. The only time I can remember seeing this bird perch in a tree, was just before I took this nest and eggs, when to my surprise one of the birds (♀) flew up on to the branch of a Forest Oak (*Casuarina*) at a height of about 16 feet, and sat there for nearly a minute. I think it was done with the object of making a preliminary survey of the surroundings before returning to her nest again, for she seemed to know that her naturalistic admirers were in the vicinity, but was quite unconscious of the raid which we had pre-arranged and planned for the capture of her comfortable little domicile and its contents. The nest was composed of soft bark and delicate rootlets, interwoven with masses of cobwebs, and decorated with several portions of a bright green fern-like moss; it was well protected from storms, floods, and bush fires, and nothing less than a severe earthquake could have destroyed it. It was suspended from the edge of a very thin layer or stratum of sandstone on the very flat roof of the cave, and well out of reach of the bush rat and predatory snake, etc., being nearly five feet up from the floor of the cave. It is wonderful the neat way in which these birds secure the *top portion* of the nest to the roof of the cave, considering the work is often done in a dark place, and apparently under great disadvantage, as the birds have no foothold while at the commencement of their work. The material used for this purpose consists principally of strong glutinous cobwebs, which sometimes are utilized in conjunction with another sticky substance, and resemble those which are used by Wasps (*Vespidæ*) in fastening their paper-like nests to verandah roofs, etc. Notwithstanding that the nests of the Rock Warbler are well hidden in the dark caves, etc., yet the Fan-tailed Cuckoo cunningly fossicks them out, and places her egg in same. The nest under notice is not such a large one as the former specimen (data No. 547), on account of it being devoid of a tail. It measures one foot long by five

FLASHLIGHT PHOTOGRAPH OF THE NEST OF THE ROCK WARBLER,
Showing it suspended from the roof of the cave.
(One sixth of the natural size.)
Loc., Blue Gum Gully, Chatswood, near Sydney.
(*See data No. 547A.*)

No. in A.J. Data No.	Campbell's Book.	No. of Eggs.

inches across, and is comparatively very light. On the 2nd of August the nest contained 2 eggs, and also on the 4th, but on making a careful examination of it when measuring it afterwards, I was pleasantly surprised to find a third egg embedded in the lining, it having evidently been laid before the bird had finished padding the interior. It was a lucky find, and now makes a complete set of 3, all of which possess minute specks of brown on the larger ends, though as a rule, these eggs are absolutely devoid of markings. I experienced much difficulty in taking the flashlight photograph of this nest on page 103, owing to the very awkward way in which I had to fix my camera inside the mouth of the

Showing the entrance or opening to the cave in which the Rock Warbler's nest was found.
Loc., Blue Gum Gully, Chatswood, near Sydney.
(*See data No. 547A.*)

cave, to enable me to get a proper view of my subject. Four exposures were made on the one plate, extending over four minutes ten seconds, the intervals being necessary in order to allow the congested smoke from the magnesium light to escape from the cave, otherwise the picture would have been totally fogged and destroyed. The other two photographs show, from two different positions, the cave from the outside, and give a person a good idea of the class of country which this bird loves to live in. This nest did not contain an egg of the Fan-tailed Cuckoo, as was the case with the former nest, but

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

Photograph taken from a high rocky ledge, looking across a sunlit part of Blue Gum Gully, at Chatswood, near Sydney. The cave which contained the Rock Warbler's nest is on the right of the white cross, near the top of the picture.

(*See data No. 547a, page 103*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

that is simply on account of it being rather early in the year for this Cuckoo to lay; but in the second brood, which is much later in the season, the egg of this Cuckoo will frequently be found in these nests. Twenty-six days later (August 30th), I again found a nest, but only after patiently watching the birds for some time, following them up and down the sides of the rugged gorge, and examining hollow logs, rocks, as well as caves and other likely places. It was nearly completed, and was suspended from the roof of a small square opening, which ran back a distance of about twelve feet into the rock, near the top of a ridge, and within a hundred yards of the cave from which the nest (547A) was taken, although in a more unlikely and less frequented spot, and was built by the same pair of birds. Of the set under notice, Specimen A. measures = 0·85 × 0·60, Specimen B. measures = 0·83 × 0·59, Specimen C. measnres = 0·82 × 0·62.

548 53 4 **WHITE-WINGED CHOUGH,**

Corcorax melanorhamphus, Vieillot.

Beautiful clutch of 4 fresh eggs, taken by H. Scotney at Harriman Park, South-western Queensland, on 8th September, 1897. My first acquaintance with these birds was made on the Darling Downs, Queensland (in 1888), where I had the pleasure of hearing their peculiar cry, and finding many of their nests. They were comparatively very large bowl-shaped structures, composed of dried mud and lined with grass, etc., and were all placed on the horizontal branches of forest trees. I discovered the birds and their nests in the following manner:—While in Toowoomba, Q., I arranged a little trip in order to explore the very unfrequented scrubs in the vicinity of Jondaryan and Rosalie stations. Our party, consisting of seven, reached Jondaryan Railway Station by train, and thence by the only conveyance available (a rough spring cart), 25 miles to Patch's scrub. Andy Flannagan, a real specimen of a humorous Irishman, and the proprietor of the hotel at the railway station, provided the vehicle for us, which we were glad to get. Leaving late in the evening, it was early morning when we got to the scrubs, after a most amusing time travelling in the dark, and not knowing the track. We were all in high spirits, and thoroughly enjoyed the big jolts and deep ruts we got into; the mailman, who drives a buckboard buggy, laughed heartily when he saw the places we wandered to. Jack Patch and the family made us very comfortable, in real bush style, and after a rest we started away exploring the beautiful Bottle tree scrub, known as Patch's, our party being led by Jack, who knows every inch of the country. We shot a fine lot of Scrub Turkeys and Wonga Wonga Pigeons, but the nettles were very troublesome to us. Some of the Bottle trees (*Sterculia rupestris*) were over 30 feet in circumference at the base. Outside the scrub the Choughs were everywhere numerous; also their nests. Specimen A. measures = 1·67 × 1·17.

549 159 3 **SATIN BOWER BIRD,**

Ptilonorhynchus violaceus, Vieillot.

(This bird is known to the aborigines of the Clarence River district as "Bar-wee.")

Very handsome set of 3 eggs, of the spotted and blotched variety. Taken by Sid. W. Jackson, near Cloud's Creek, on the Armidale Road, south-west of Grafton, New South Wales, on the 23rd of December, 1896. The accompanying photograph on page 107, illustrating the nest and set of 3 eggs appears also in A. J. Campbell's book opposite page 192, and my notes on pages 194 and 195. Specimen A. measures = 1·82 × 1·24; Specimen B. measures = 1·78 × 1·23; Specimen C. measures = 1·81 × 1·23. The latter specimen (C.) is somewhat pyriform in shape. I find that the eggs of these birds are subject to very great variation in their size, shape, ground colouring, also the general disposition and shape of the markings. In one case the eggs are boldly blotched and spotted, in another the markings are dull, cloudy, and much broken; and I have taken sets of another form, where the markings consist of long, wavy and twisting lines, predominating at the larger ends of the eggs. (See set No. 550A). This latter variety very much resembles the beautiful line-covered eggs of the Regent Bower Bird (*Sericulus melinus*), Swainson, only of course the eggs of the former are larger and of a darker ground colour than those of the Regent Bird. The above set of 3 eggs were the first specimens I took during my visit to Cloud's Creek, as will be seen by the following notes. On the

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

23rd of December, 1896, I started from South Grafton at early morn, and proceeded on my bicycle to Nymboida, thence on towards Cloud's Creek, which I subsequently passed. On reaching my destination, after a good day's riding on the machine, which was loaded with tent, camera, rations, etc., I pitched "camp," and being very anxious to do some egg hunting before dark, in this beautiful locality, I had a stroll among the Oak trees (*Casuarina suberosa* and *C. torulosa*) that grew along the edge of the scrub. My desire to revisit the haunts of this Satin Bower Bird was very great, and I had not been so very long in the vicinity when strange cries came to my ears from down the gully. I then walked down very cautiously in that direction, when my attention was attracted to an Oak tree, through noticing a female fly suddenly from a cluster of Mistletoe (*Loranthus linophyllus*) in it. On climbing up I found a nest carefully concealed in this parasitical growth, which contained 3 beautiful eggs, quite fresh (see data No. 549.) It was a rough structure of sticks and twigs, and resembled very much the nest of the Black-throated Butcher Bird (*Cracticus nigrigularis*), but was lined with dead leaves of the Spotted Eucalyptus instead of roots and grass, and was about the same size as that which we found at Nymboida during October 1895, and from which we took set No. 550A. I carefully emptied the nest of its contents, but unfortunately it could not be removed in perfect condition, on account of the sticks and twigs of same being so interlaced with those of the Mistletoe, and the latter were growing on rather a thick limb. After making further searches, I succeeded in finding nine more nests, within a radius of a mile of my camp, all of which were built in Oak trees (*Casuarina*), and in the same position as the first nest was found, with the exception that four of them were built in the upright forks of the trees, and not in the Mistletoe, as the other six were. Of the nine nests found there were eggs in four of them, out of which I got one fresh set of 2, and a few addled specimens, the balance of them being too far advanced in incubation to be blown. The remaining five nests all contained young birds covered with down, and in one nest I found a young bird possessing four legs, and now regret I did not keep the curiosity instead of placing it back into the nest. In all I procured seven eggs, which varied much in size, shape and colour. Out of the ten nests found, the following is the detailed result :—

NEST AND CLUTCH OF 3 EGGS OF THE SATIN BOWER BIRD.
(About one-eighth of the natural size.)
Loc., near Cloud's Creek, Clarence River district, N.S.W.
(*See data No. 549, page 106.*)

One nest contained set of 3 eggs (fresh).
One „ „ „ „ 2 „ (almost fresh).
One „ „ „ „ 1 „ (addled) and 1 bird.
Four nests „ „ „ 3 young birds each.
Two „ „ „ „ 2 eggs each (heavily incubated).
One nest „ „ „ 3 „ (1 addled, 2 heavily incubated).

The nests were placed at elevations varying from twenty to thirty feet, and in cases where they were not built in the Mistletoe, they were situated in forks near the trunks or centres of the trees, at the topmost parts. The birds were very tame, and did not come near me when I was at the nest, my presence evidently not causing them much alarm, but they sat and poured forth their guttural cry from adjoining trees. I spent four days alone in these woods, away from all interruption, having a very busy time, and before packing up camp found two more nests, but very old ones, which had probably been a

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

few years built. While climbing up to one of the nests, and when nearing the same, I received rather an unexpected shock by finding a huge Goana, known also as Iguana (*Hydrosaurus varius*), just starting to eat one of the heavily incubated eggs, though fresh ones are, of course, generally preferred. The ugly creature, in its sudden amazement, jumped on my head, and then descended to the ground. The feeling was not by any means pleasant, but the experience was rather unique. My brother and I have often seen these Iguanas eating Magpies' eggs on the rocky ridges north-west of Toowoomba, Q. The Magpies built in the Ironbark trees on these spurs, and we have frequently hunted these reptiles from the nests during season of 1889. On a more recent visit to the haunts of the Satin Bird, I found them all busily engaged building, and came across several of their partially constructed nests, which were again placed in Oak trees. Having to return to Grafton a few days after, and unable to await the result of the building operations, I arranged with a friend who was camped in the locality to take the eggs for me later on, and left him the necessary blowpipes and drills. However, before the birds had started to lay, and as the nests were nearing completion, a disastrous hail storm broke over the district one afternoon, devastating everything and smashing the nests beyond all recognition. In the thickly timbered belt of country extending from Nymboida to the rich Don Dorrigo plateau, severe hail storms of an unusual character are very prevalent during the warmer months. I have seen the bark on the Eucalyptus trees in these localities deeply dented all over on the side which the storm had struck, and so deep were these incisions that they appeared like the marks resulting from the blow of a hammer. These bruises soon turn to a brownish color, remaining visible on the trees for many months; then disappear gradually as the bark is shed. Although I have been fortunate with the eggs of this bower bird, they are nevertheless rare items, and are still a great desideratum in many collections. A. J. Campbell, writing on this species, states:—"It is somewhat remarkable that, notwithstanding the Satin Birds are plentiful locally, the eggs are exceedingly rare in collections."

BOWER OR PLAY GROUND OF THE SATIN BOWER BIRD,
Decorated with numerous snail shells and feathers.
(About one-twelfth of the natural size.)
Loc., Badger Corner, Don Dorrigo Scrubs, N.S.W.
(See data No. 550.)

550	150	2

Beautiful set of 2 eggs, of the irregularly lined variety, the lines and hook-like hieroglyphics being chiefly confined to the larger end of the eggs. This is a very rare and peculiar form of markings for this species, and they are even more pronounced in the following set. The nest was built in a Mistletoe (*Loranthus linophyllus*) in a Forest Oak tree, 26 feet from the ground, at Bostobric, near Don Dorrigo scrubs, N.S.W. Taken by Frank and Sid. W. Jackson on the 14th of October, 1898. Specimen A. measures = 1·57 × 1·15. Of the bowers or play-houses of this species we found quite a number, both in the Clarence River district and in the Don Dorrigo. Those found in the latter locality

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

were always the finest structures, and were tastefully decorated by the birds with coloured berries, leaves, dead land shells (snails), glass, blue feathers, etc. ; even tobacco tags, dropped by the men working in the scrubs, were amongst the ornaments found in the bowers. The decorations always depended entirely on the condition of the surroundings. The bower is simply a play-ground or courting place. Some people are under the impression that the birds deposit their eggs in these bowers ; this, of course, is a very wrong idea ; the play-ground is in no way connected with the nidification. The accompanying illustration of the bower of this Satin Bird (page 108), is from a photograph which I took at Badger Corner, in the Don Dorrigo scrubs, in October of 1898, and not far from the nest which contained the set of eggs under notice. This beautiful play-ground contained, amongst its various decorations, a tail feather of the Lyre Bird ; also, blue Parrot feathers, coloured leaves, and quite a number of dead snail shells, the latter comprising some rare species, peculiar to those parts, viz. :—*Helix ptycomphala*, *Helix Bellengerensis*, *Helix dupuyana*, *Helix Strangei*, and the beautiful delicate *Bulimus Larreyi*. The latter shell, which was described 34 years ago, was named after an aboriginal known in those days as "King Larrey," and who was with John Brazier, C.M.Z.S., the conchologist, when he originally found this new species at Manarm Creek, near the Don Dorrigo, in 1873. When I related my find of this rare snail shell to Dr. Jas. C. Cox, M.D., F.R.C.S., he was quite elated over it, as the specimens in his great conchological collection had been found by J. Brazier in the scrubs near the Don Dorrigo in 1873, and the doctor had not seen any others since then. Rare land shells are often found in the various Bower Birds' play-grounds. It would be interesting to learn why these birds have the strange habit of decorating the bowers with blue feathers and pieces of blue glass, in preference to other colors. Their eyes being of a beautiful blue may probably have something to do with it. The glass usually consists of portions of broken castor oil bottles, which the birds pick up about the settlers' homesteads in the scrubs.

Our camp at Nymboida, near Grafton, N.S.W., close to the Oak forest from which we took the set of Satin Birds' eggs.

(*See data No. 550A.*)

550A	150	2

This magnificent clutch of two eggs was taken in the Oak forest, close to a dense scrub, near Nymboida, and situated 33 miles south-west of Grafton, N.S.W., on the 29th of October, 1895, by W. McEnerny, J. Bennett, and Sid. W. Jackson. Unfortunately we were only able to spend one day in the latter locality, otherwise we may have been successful in finding more of these nests and eggs. It was this find that encouraged and prompted me to revisit the locality again, and also Clouds Creek in December of the following year (1896), when I took, with other specimens, set No. 549. The pair of eggs under notice are very elongated specimens, and are most beautifully veined all over, on a ground of yellowish-stone, with long lines of cinnamon-brown, purple, and purplish-grey, the latter appearing as if beneath the surface of the shell. They look as if a person had painted fanciful shapes and figures on the shell with a brush. These curious lines and hook-like markings twist and bend about in all directions, and on specimen A., which is an unusually well-marked egg, the bizarre markings are very numerous,

MISTLETOE GROWTH CONTAINING THE NEST AND A HANDSOME PAIR OF EGGS OF THE SATIN BOWER BIRD.
(Nearly half of the natural size.)
Loc., Nymboida, near Grafton, New South Wales.
(*See data No. 550A.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

and the egg resembles some of those laid by the Regent Bird. This is the most exquisite clutch that has yet come under my notice, and strange to say was my first find of the eggs of this species. The nest was placed twenty feet high, and entirely hidden in the dense foliage of a large clump of Mistletoe (*Loranthus linophyllus*), which grew on a branch of a Forest Oak (*Casuarina torulosa*). After removing the eggs the limb was cut off and carefully lowered, and in order to photograph the nest to advantage I was obliged to cut away a great quantity of the Mistletoe. The accompanying illustration on page 110 shows the nest, containing the two eggs, in its natural position in the upright and thicker branches of the latter parasitical growth. The nest was composed of thin sticks and twigs, and measured ten inches across, the lining consisting of several layers of dead Eucalyptus leaves, some of which are plainly visible in the illustration. In the accompanying photograph specimen A. is also shown natural size. Specimen A. measures = 1·85 × 1·13 Specimen B. measures = 1·67 × 1·12.

A WELL MARKED EGG OF THE SATIN BOWER BIRD.
(*Specimen A. of set data No. 550A.*)
(Natural size.)

551 159 2 Set of 2 eggs, which are of the cloudy marked variety, and were taken from a nest built in a Mistletoe (*Loranthus linophyllus*) in a Forest Oak tree (*Casuarina torulosa*), at Tyringham, nearly 60 miles south-west of Grafton, N.S.W. Taken by A. and P. Boon on the 4th of November, 1898. I have never known these Satin Birds to build in the scrubs, always selecting (from what I have seen of them) the Forest Oak trees. The Regent Bower Bird, however, always builds in the scrubs, and never in the forest. The Satin Bird is a great mimic. The first set of their eggs which came into my possession was, unfortunately, end blown, and was found in an Oak tree (*Casuarina*), in the bush near Tyringham, by my friends Arthur, Albert, and Philip Boon, during season of 1892. The set now under notice concludes the series of the four magnificent clutches displayed in this collection, and is probably the finest series extant. Specimen A. measures = 1·74 × 1·15.

552 168 2

REGENT BOWER BIRD,
Sericulus melinus, Swainson.

(This bird is known to the aborigines of the Clarence River district as "Whar-gi or Bullen Bullen.")

Handsomely marked set of 2 eggs, possessing the usual mass of labyrinthine lines, turning and twisting in every direction. The nest measures nine inches across, and is of very loose construction, the eggs being visible through it from below; it was built of sticks, thin twigs, and the dried yellow stems of a tree Orchid, and was placed in a tree locally known as the Cork tree (*Duboisia myoporoides*), on account of its bark resembling that substance, being built at a height of only 16 feet, and was of course easy to procure. The nest and eggs, which are shown in the accompanying photograph on page 112, were taken in the scrub between Booyong and Binna Burra, north-east of Lismore, in the Richmond River district of New South Wales, on the 20th of November, 1899, by W. McEnerny and Sid. W. Jackson. No scrub remains now (1907) between Booyong and Binna Burra, and I was greatly surprised to notice how everything had been cut down and burnt, when I revisited the district in November of 1904. The dairying industry has made marvellous progress there during the past seven years, necessitating the demolition of the scrubs, so that the birds have been driven to the dense bush situated towards the Queensland border. While camped at Booyong, we found four Regent Birds' nests, and took two sets of eggs; one nest was placed only seven feet from the ground, about a hundred yards from the camp, and where it was obtained, in the *then* dense scrub, a comfortable little homestead now stands. These beautiful gold and velvet-black plumaged birds, came frequently about the camp, and did not appear very shy; while numbers were often to be seen feeding along the edge of the scrub on the ripe berries of the Ink Weed (*Phytolacca dioica*) and the wild Raspberry (*Rubus rosæfolius*).

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

We were successful in finding five of their bowers or "play-houses," which are a great deal smaller than those of the Satin Bower Bird, the sticks being placed more upright, and do not droop over so much at the tops as in those of the latter birds. One bower, in the scrub across Unio Creek, was nearly always frequented by the birds as we passed, and we spent several hours watching them tossing snail shells and highly coloured berries and flowers over their backs, and then running in and out of the bower, and re-arranging them in it. Every time we halted to examine this play ground they would have a fresh supply of snail shells, berries (red, yellow, green and blue), and highly coloured leaves and

NEST AND EGGS OF THE REGENT BOWER BIRD.
(Nearly four-fifths of the natural size.)
Loc., Booyong Scrubs, Richmond River, N.S.W.
(*See data No. 552.*)

flowers arrayed. One morning I found in it a *fresh* yellow blossom of a very disagreeable aroma, belonging to a ground creeping plant (*Hibbertia volubilus*) which only grows in the bush adjacent to the sea shores, and to get this the bird must have travelled nearly 26 miles, as Booyong is 13 miles from the sea as the crow flies. This just shows the amount of hunting and the distances these birds travel in order to secure some highly coloured object for the æsthetical decoration of their happy play grounds or bowers. During my last visit to this bower, I counted no less than 53 snail shells, which comprised the following nine species, most of which are only found in the scrubs of the Richmond River district, viz., *Helix confusa*, *H. Strangei*, *H. Fraseri*, *H. Porteri*, *H. mansueta*, *H. pudibunda*, *H. Falconari* (*young*),

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

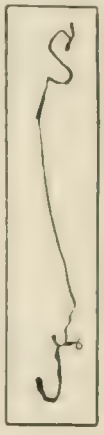
H. brevipila, and H. Richmondiana (young). In addition to these shells, and the coloured berries, leaves, etc., were numbers of the large glossy seeds from the Black Scrub Plum, known also as the Black Apple (*Sideroxylon australe*), an insipid fruit which grows as large as a fowl's egg. This bird was discovered during the regency of George IV., and was so named as a compliment to him. The camera was indeed of very great service to me while engaged collecting in the scrubs, and with it I was enabled to secure photographs of some very rare and interesting subjects. Before leaving Booyong I took the accompanying photograph of the play-house of the Regent Bower Bird, which I have already spoken of as being in the scrub across the creek. This bower was visited by the pair of birds belonging to the nest which contained the two eggs shown on page 112. Of the set of 2 eggs under

BOWER OR PLAY GROUND OF THE REGENT BOWER BIRD,
Showing snail shells, berries, flowers, seeds, etc., used by the birds for decorative purposes.
(About one-sixth of the natural size.)
Loc., Booyong Scrubs, Richmond River, N.S.W.

notice specimen A. measures = 1·45 × 1·03, and is a beautifully marked egg, the long wavy lines continuously encircling it, and leaving the pointed end clear. On each side of the drill hole of this egg is a figure of the alphabet, and looking at it with the pointed end towards you, and the drill hole up, there is a capital **S** on the right hand side; from it a delicate but distinct line runs past and below the drill hole to the left and around the egg, and touches the top of a capital **J**. This is a very strange coincidence, inasmuch as my initials are formed of those two letters. The drawing reproduced on page

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

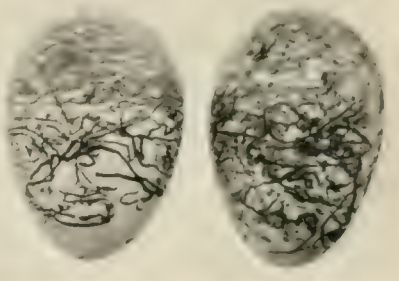
114 is a *facsimile* of the two letters on the egg, and of natural size. Specimen B. measures = 1·51 × 1·07, and is well marked, but the lines are more interrupted and broken, and do not so frequently encircle it. The larger end of this specimen, however, is very free from markings, and is just the reverse to Specimen A. The eggs of this species resemble very much those of the Spotted Bower Bird, only the latter have a faint greenish-grey ground colour. Like the Satin Bower Bird, the Regent Bird sometimes builds in the Mistletoe, and we found this to be the case on two occasions in the Booyong scrubs, in clusters of the scrub species (*Loranthus alyxifolius*), growing on the Booyong trees (*Tarrietia actinophylla*). I have seen the birds as far north as the Pine River scrubs, north-east of Brisbane, Q., and as far south as the Ourimbah scrubs, near Gosford, N.S.W. Their note is very like that of the Satin Bird, and is a peculiar guttural sound resembling "kar-r-r-r-r."



553 162 2

SPOTTED BOWER BIRD,
Chlamydera maculata, Gould.

Handsome set of 2 eggs, taken west of Rockhampton, in Central Queensland, on the 16th of September, 1898, by W. B. Barnard. The nest of this species is very loosely constructed of small sticks and twigs, as is the case with that of the Regent Bower Bird; the eggs likewise being plainly visible through it from beneath. The eggs of this set are smaller than those of the Regent's (No. 552), the ground colour being of a very pale greenish tinge, while those of the latter are of a light yellowish stone. There is a distinct difference between the eggs of the two species, but at first glance they appear very much alike. Both the eggs are beautifully marked, and specimen A. has the thread-like lines wound round and round the centre, leaving the thin or pointed end free of them. As A. J. Campbell says—"the eggs are very beautiful, and most singular in appearance, resembling fine porcelain with hand painted markings." They have the resemblance also of an egg which has coloured threads wound carelessly around it. One of the first authenticated sets of these eggs discovered was found by J. B. White, and described by Dr. E. P. Ramsay, *vide* "Proceedings of the Zoological Society, 1874." Specimen A. measures = 1·39 × 1·02. Specimen B. measures = 1·43 × 0·98.



EGGS OF THE SPOTTED BOWER BIRD,
(Almost natural size.)
(*Clutch data No. 553.*)

554 165 1

QUEENSLAND BOWER BIRD,
Chlamydera orientalis, Gould.

Clutch of one egg, though two usually form the sitting. Taken at Tolworth, near Cooktown, North Queensland, by W. Fuller, on the 18th of September, 1901. This is not such a well marked specimen as those of the latter two species, the lines on this egg being very short and broken. Dudley Le Souëf, of Melbourne, found these nests containing only a single egg, during his visit to North Queensland. It measures in inches = 1·63 × 1·07.

555 161 2

CAT BIRD,
Ælurœdus viridis, Latham.

(This bird is known to the aborigines of the Richmond River district as "To-wan-gera.")

Splendid set of 2 eggs, taken at Booyong, near Lismore, Richmond River, N.S.W., by Sid. W. Jackson, on the 29th of October, 1899. The nest was placed in a Maiden's Blush tree (*Echinocarpus australis*), at an altitude of 27 feet, and is a beautiful rustic structure, being very deep, and composed of large dead leaves and twigs of the latter tree. We found thirteen nests between Booyong and Binna Burra during October and November of 1899, and succeeded in obtaining eggs from five of them. The first nest found was in a Booyong (*Tarrietia actinophylla*) sapling, standing only a few feet from the

Data No. | No. in A. J. Campbell's Book. | No. of Eggs.

tent; and during a severe storm one afternoon, just as we were preparing to rob it, the sapling, which was a very long thin one, was bent over to such an extent that the two fresh eggs rolled out, and landed at the rear of our camp. The tree was then cut down, and the nest secured. Only on one occasion did I take a set of three eggs, two usually forming the full sitting. The real cat-like cry of these birds was heard at all times, from daylight in the morning till after dusk at night. In addition to the mew-like sound, they often utter a short shrill whistle resembling "pit-pit-pit." When first I heard it I was looking everywhere in the trees for another bird, never dreaming for the moment that it emanated from the Cat Birds, and I found that when this short peculiar whistle is made, they toss their heads suddenly forward as if sneezing. I have come across these birds as far south as Ourimbah, near Gosford, N.S.W., and found several of their nests, but none containing eggs. They were built in bushy scrub trees at the heads of the gullies, between the mountains, in very secluded spots. During a recent visit of the members of the N.S.W. Naturalists' Club to this locality, they were somewhat surprised in finding traces of my ramblings and work at the head of nearly every gully, in the shape of my tree markings (3 nicks). This is a habit I adopted some years ago and I have found it very useful for many reasons. In the Clarence River district my bush mark can plainly be seen to this day on many trees from which eggs have been taken, at heights up to 125 feet. Blackfellows passing along, and noticing these marks at such heights without traces of climbing, must think there is something uncanny or "big one debil debil" about them, the tree "climbing ladder" would never occur to them, of course. Specimen A. of the set measures = 1·68 × 1·20. Specimen B. measures = 1·73 × 1·20.

NEST AND EGGS OF THE CAT BIRD,
(About one quarter of the natural size.)
Loc., Booyong Scrubs, Richmond River district, N.S.W.
(*See data No. 555 page 114*).

556 160 2

SPOTTED CAT BIRD.

Ælurœdus maculosus, Ramsay.

Perfect set of 2 eggs, taken at North Queensland on the 20th of October, 1895. The eggs are smaller, and of rather a lighter colouring, than those of the previous species. Specimen A. measures = 1·55 × 1·10. Specimen B. measures = 1·62 × 1·11. Received from Chas. French, jnr., Melbourne.

557 31 2

N.S.W. RIFLE BIRD OF PARADISE.

Ptilorhis paradisea, Swainson.

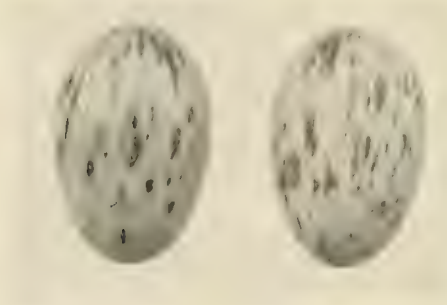
Clutch of two magnificent eggs, which are perfect specimens, and are the *first* pair of their kind known to the scientific world. They were taken in the scrub at Booyong, 14 miles north-east of Lismore, in the Richmond River district of New South Wales, on the 2nd of November, 1899, by W. McEnerny and myself. The nest was placed 30 feet from the ground, in a Scrub Cherry tree (*Elæodendron australe*).

I arrived at the Booyong scrubs, from Sydney, on the 4th of October, 1899, and on the second morning, at twenty minutes to five, was awakened by one of these birds making its grating or rasping-like noise just at the back of the "camp," and behind me as I reclined in my bunk. I took no notice, however, but next morning it was repeated, and I was awakened at 4·30 a.m., and then became very interested, deciding to visit the spot next morning if the noise, or note, was for the third time made. Next morning I was again awakened by this bird, this time at nearly five o'clock, so I slipped on a pair of boots, and in my pyjamas made my way through the treacherous Lawyer Vines and thorn bushes to the part from which the sound appeared to come. I had not gone far when I saw a female Rifle Bird fly from a dark clump on top of a Scrub Cherry tree, down upon a Water Vine (*Vitis hypoglauca*), which hung swing-like between two trees. When I witnessed this I stood motionless, speechless, and almost breathless with excitement, and watched the female on the vine; she sat there for fully fifteen minutes,

NEST AND EGGS OF THE N.S.W. RIFLE BIRD OF PARADISE (*Ptilorhis paradisea*), Swainson.
(Nearly half of the natural size.)
This was the first clutch of these eggs known to science.
Loc., Booyong Scrubs, Richmond River district, N.S.W.
(*See data No. 557, page 115.*)

eyeing me in all ways, and turning around and looking down at me side ways; then she would spend a few minutes combing and cleaning her feathers with her long curved bill. During this performance a handsome male bird suddenly put in an appearance, and deliberately flew down on the side of the rough-barked trunk of a tall Red Cedar tree (*Cedrela australis*), within about three feet of me. After carefully scrutinizing me all over, in a somewhat inquisitive manner, and having remained on the side of the tree for about fifteen seconds, it gave two dreadful screeches and then disappeared very suddenly, and just as mysteriously as it came. All kinds of pictures then flashed across my mind. I imagined the nest was not far off, and that it contained a lovely set of eggs; then again I thought it must have young in it, as the hen bird sat so long in the one place. At last I tried to raise my hopes by surmising she was building, when off she flew, and went in almost a straight line through the scrub.

It was a relief to me, as I was quite cramped standing in the same position, and unable to kill the large mosquitoes that had been feeding on my hands and face, as well as remove the blood-thirsty scrub leeches, which had also found me. I did not go away, however, but sat down behind a tree for fully another twenty minutes; still she did not return, and my hopes began to fall again. By this time, about 5.30



EGGS OF THE N.S.W. RIFLE BIRD OF PARADISE.
(Almost natural size.)
(Clutch data No. 557.)

a.m., the scrub was better lighted, and I walked over and looked up at the dark clusters of Lawyer Vines (*Calamus australis*) and Scrub Cane (*Flagellaria indica*), which were interlaced with the foliage at the top of the Cherry tree, and could see an isolated clump up near the top. However, on examining the ground directly beneath this nest-like object, I found several freshly plucked portions of a small round-leaved climbing fern (*Polypodium serpens*), which of course told me that there was a nest of some kind in course of construction overhead. I was now satisfied, and immediately quitted the spot, returned to camp, and found W. McEnerny, my assistant, wondering what had become of me; and when I related my find to him it was, of course, at once treated as a joke. At mid-day on the same occasion, when the sun was well overhead, we *both* visited the spot together, and with the aid of the field glasses could see a nest with masses of the latter tree climbing fern built into it, as well as cast off snake skins dangling from it and the vines close by. I climbed up, after erecting a long pole and securing it with three guy lines, but did not put my hand near it, nor did I smash or disarrange any twigs or limbs on my way up and down; it was a new nest, and quite green with the vast quantities or the climbing fern that had been utilized in its construction. It was rather deep, and looked nearly ready for eggs. Next day the camp was left in charge of my assistant, and I proceeded to Sydney by steamer from Lismore, in order to attend to some business matters there; returning to the scrub again within

Wm. McEnerny going up the pole to the nest from which we took the first known clutch of eggs of the N.S.W. Rifle Bird of Paradise.
Loc., Booyong Scrubs, Richmond River, N.S.W.
(See data No. 557, page 115.)

even days. W. McEnerny assured me that no person had been near the tree containing the nest during my absence, and according to my instructions no gun had been fired in that neighbourhood. So with the full determination this time of taking a set of eggs from the nest (8 days since I last climbed up), I again erected the pole and ascended; but how my heart dropped when I found the nest filled level to the top with dead leaves (*induviæ*), and *different* to any of those on the trees towering above the nest. I did not know what to do; had the birds abandoned the nest? was the question, or had they filled it with the leaves for their own purpose? which no doubt would be their object, thus keeping intruders away until they were ready to lay, and so give the nest a desolate effect. No doubt that this is the precaution the birds had taken for doing so. I took some of the dead leaves from the nest with a pair of forceps, and compared them with those on the trees growing in the immediate surroundings, but found none to correspond with them. I was then satisfied that the birds had placed them in the nest themselves. I then left it for seven days more, and after hearing the birds *screeching* early one morning behind the camp, having been silent for that time, I erected the pole, and after securing it with three ropes, climbed up to the nest and found in it not "dead and twisted leaves," but instead two magnificent eggs, which were quite fresh. It was a glorious sight to look into the nest this time, when I took those two lovely specimens from it, and knowing they were the first and only pair then recorded to science, made me feel as though I had suddenly and unexpectedly inherited some big fortune. I was all excitement. This took place on the 2nd of November, 1899, and it was only very great patience and perseverance that won for me these highly treasured specimens. The tree was then cut down, the nest and eggs replaced in their natural positions, and then photographed. This handsomely-plumed bird is the most southern representative of the magnificent Birds of Paradise, and is chiefly confined to the rich scrubs of South-east Queensland and North-east New South Wales, its southern limit now being about the Manning River district, where a few may be found. The first bird ever seen was supposed to have been shot by a convict named Wilson, in 1823, which was described by Swainson in 1825; and it seems very remarkable that the first recorded *set* of their eggs (data No. 557) was only taken in 1899, seventy six years afterwards. The males sometimes breed before their full and beautiful livery is donned; the plumage prior to the transition stage being brown, and similar to that of the female. At Booyong I succeeded in procuring one of these partly-plumaged males, whose upper surface is similar to the females, with one or two black feathers appearing about the back of the neck, and some of the brownish primaries becoming dusky-coloured. On the under surface the arrow-shaped markings on

A peep into the nest of the N.S.W. Rifle Bird of Paradise, in its natural position in the dense Lawyer vines.
(About one-fifth of the natural size.)
Loc., Booyong Scrubs, Richmond River district, N.S.W.
(See data No. 557.)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

the feathers are generally darker and slightly mottled in parts; the chest has a few shining spangle-like shields and patches of sooty-black; the thighs also are sooty, and on the abdomen is a patch of feathers margined with rich olive green. See A. J. Campbell's book on "Nests and Eggs of Australian Birds," page 1073, for my notes on these finds; the photograph of this nest and set of eggs is opposite page 68. Accompanying these descriptions will be found several photographs treating with this set of eggs, which give the following measurements:—Specimen A. = 1·36 × 0·92; Specimen B. = 1·36 × 0·90. During my stay at Booyong I found five nests of this Bird of Paradise, and was successful in taking eggs from three of them. This set of 2 (No. 557) was the first find, and was taken on the 2nd of November, 1899. The second find, also comprising a set of 2 eggs, was made on the 20th of November of the same year, in the scrub between Booyong and Binna Burra, and the nest was placed at an altitude of 33 feet. This set I passed on to Dr. Chas. Ryan, M.D., of Melbourne. My third find was made in company with W. McEnerny, about a mile from the camp, on the 29th of November, and the nest, which contained only one egg (with incubation about seven days old), was situated only eight feet from the ground, and like the other nests was ingeniously festooned with the cast off skins of snakes (see illustration), quantities being placed on the nest and adjoining vines. This nest and egg I forwarded to the Imperial Academy of Science at St. Petersburg, Russia. The fourth nest I found on the 30th of November, near Booyong, and placed at an altitude of 45 feet in dense vines with foliage at the top of a Booyong tree (*Tarrietia actinophylla*); arrangements were made to take it the following day. During the night a violent storm brought down a giant Fig Tree (*Ficus macrophylla*), which, clearing a path for itself in the scrub, in turn brought down the tree with the nest. W. McEnerny and I set to work afterwards looking amongst the fallen debris, and after an hour's diligent search we found a large portion of the nest, with fragments of the handsome eggs. Severe storms at Booyong were of common occurrence, and destroyed at different times several sets of eggs of the various species, which we were watching with the view to taking. The fifth nest was found on the 4th of December, and was situated in a mass of parasitical tree climbing ferns (*Polypodium*), and placed at a height of 30 feet in the umbrageous foliage at the top of a small Scrub Cherry tree (*Elæodendron australe*), in the scrub on the flat across Unio Creek, about three hundred yards from our camp at Booyong. This creek received its name from us on account of the large and beautiful pearl-bearing mussels (*Unio*

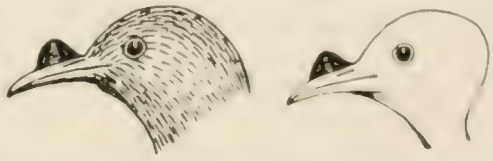
Wm. McEnerny going up the pole to the second nest of the N.S.W. Rifle Bird of Paradise.

Loc., Booyong Scrubs, Richmond River district, N.S.W.

novæ hollandiæ) which we found in it. The latter nest I found by noticing the female tugging at a very long piece of cast off snake skin, which was caught in amongst some Barrister vines (*Mezoneuron Scortechinii*), and after releasing it she flew with it to the nest, and carefully arranged it on same. After witnessing this I rested in the shade a little further away, and with the field glasses watched her visit the nest again four times within half an hour, and each trip she brought snake skins to it. I then carefully took the bearings of the tree containing the nest, and left the spot feeling thoroughly satisfied that it would be ready for eggs in a few days. I returned again in six days in great hopes of procuring a set, but was very much upset and disappointed on finding half an egg shell on the ground at the very foot of the tree, and on climbing up to the nest I was more than surprised to find two newly-hatched young birds, which were quite black and devoid of feathers or down of any kind. This now proves

Showing a pair of N.S.W. Rifle Birds of Paradise, in their natural positions, with their Nest and Eggs.
(About One-third of the natural size.)
(*See data No. 557, page 115.*)

that the nest contained eggs the day I saw her building, or rather putting snake skins on it, though I, of course, naturally fancied the nest was not finished. The two young birds looked very remarkable, and possessed large horny cones on their bills, just above the nostrils, and something similar to that found on the upper mandible of the Friar Bird or Leather Head. This protuberance on the young Rifle Bird of Paradise, is in all probability a concentrated growth, which would naturally slowly diminish as the bill started to grow and lengthen, and ultimately disappear altogether. The adult birds have long bills, which are rather curved, and average about 2¼ inches in length. In company with W. McEnerny, I again visited this nest eight days later, in hopes of caging the two young ones, knowing they were very rare items to get alive, and seldom seen in captivity; but we were again unsuccessful—they had gone—and the accumulation of debris in the nest proved beyond all doubt that they had been successfully reared. In the decoration of the five nests of this beautiful



Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

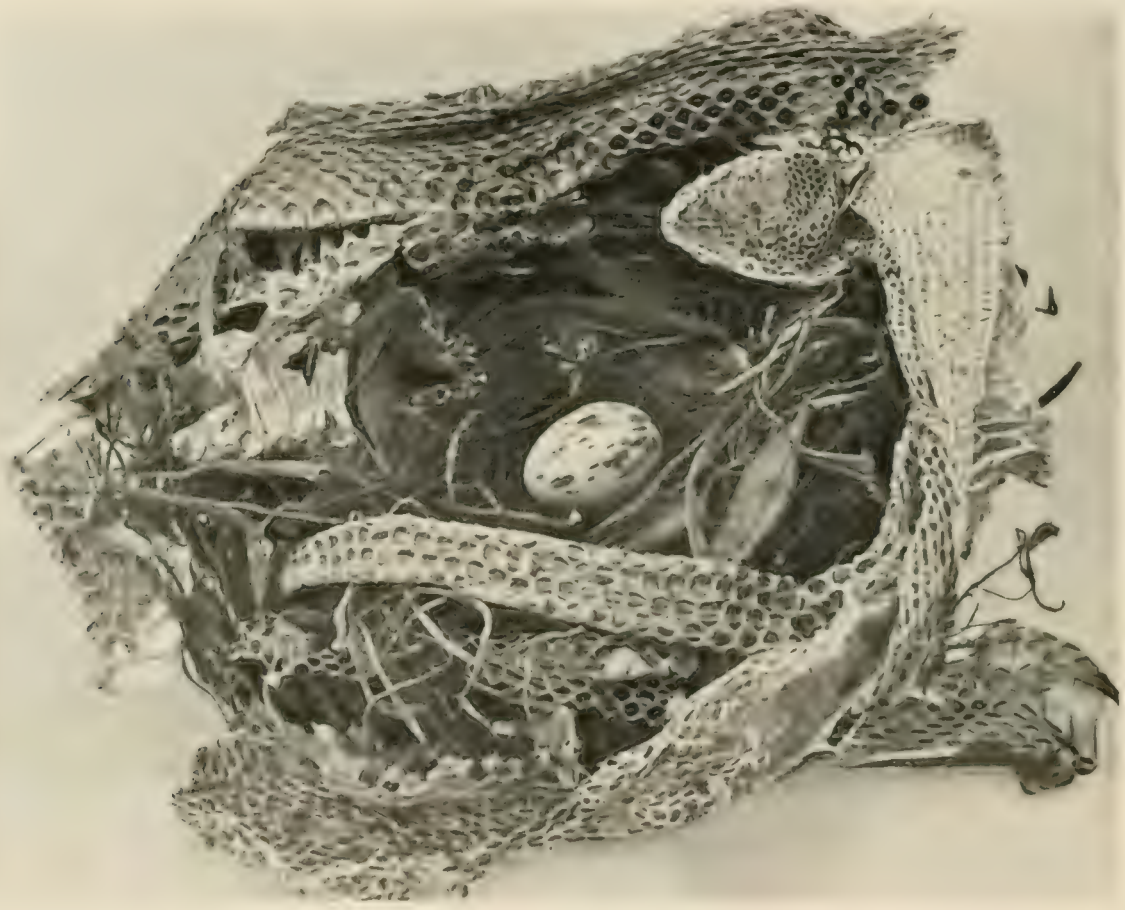
bird, which I found at Booyong, the cast off skins of the following snakes were used in profusion, viz., Black Snake (*Pseudechis porphyriacus*), Carpet Snake (*Python variegata*), and the Death Adder (*Acanthophis antarctica*). No doubt these skins are utilized for the purpose of scaring away other birds, scrub rats, and various nest-robbing animals from the nests. The eggs are glossy, of a beautiful rich flesh ground colour, and, like those of the two following species, are marked with longitudinal streaks of reddish-brown and purplish-brown, and possess quite a hand-painted appearance. They greatly resemble those of the sumptuously plumed Red Bird of Paradise (*Paradisea raggiana*) of New Guinea, with the exception that those of the former are a little smaller. I had the pleasure lately of examining in the collection of the Macleayan Museum, at the Sydney University, an egg of the latter species taken in New Guinea. In the Richmond River scrubs we noticed the Rifle Birds of Paradise frequently

Our Camp in the Booyong Scrubs, Richmond River, N.S.W., in 1899. Reading from the left the persons are—W. M. Parker, I. J. Foster, and W. McEnerny. The white cross denotes the position of our first find of the nest of the Rifle Bird of Paradise, from which clutch data No. 557 was taken.

devouring large yellow centipedes, which are collected in the hollows of trees, and the only time that I noticed one of these birds on the ground was when a female dropped a huge centipede, and flew down to pick it up. Strange to say we only saw the hen birds go into the hollows in quest of insects, the handsome males never doing so; but we have known a hen to remain in a cavity for nearly half an hour, and then finally make an appearance again with a centipede in her bill, which she would give a few hard raps on the limb, and then swallow, the tail end of it wriggling as it slowly disappeared. The fact that the female goes into these openings hunting for food, and remains there so long, helps to throw some light upon the story told by the aborigines to the late John MacGillivray and others. These natives may, at some time or other, have climbed up to a hollow from which they saw a female fly,

Data No.	No. in A. J Campbell's Book.	No. of Eggs.

and where she had probably been scratching and feeding for some time ; but on arriving at the branch they perhaps discovered some white eggs, and of course would naturally designate them as those of the Rifle Bird, having seen such hen leave the hollow. The eggs may, in all probability, have belonged to the Little Nightjar (*Ægotheles*), or some other species, which deposits white eggs in the hollow limbs of trees. I noticed the Rifle Bird very often scratching in amongst the dead leaves which had accumulated in the space behind the large leaves of the beautiful Stag-horn Ferns (*Platycerium grande*), and in the centres of the Birds-nest Ferns (*Asplenium nidus*) growing on the sides of the trees, wherein they find many beetles, consisting chiefly of *Carabidæ*. It was quite a common occurrence to see them hopping up the sides of the trees, after the fashion of the Tree Creepers (*Climacteris*), and with their



NEST AND EGG OF THE N.S.W. RIFLE BIRD OF PARADISE,

[Showing the quantity of cast off snake skins which has been utilized, apparently as a means of protection from marauders. This was the third nest which we discovered.

(Half of the natural size.)

Loc., Booyong Scrubs, Richmond River district, N.S.W.

long curved bills, which are so perfectly adapted for the purpose, picking up various xylophagous insects from beneath the projecting scale-like sections of bark on the Red Cedar trees (*Cedrela australis*). On a thick horizontal limb of one of these trees, near our camp, we frequently watched one of the birds (♂) doing a sort of fantastic dance ; he would open his wings to their fullest extent, then suddenly bring them over in front till the both ends touched the limb, and with his head well thrown back would walk majestically up and down the limb a distance of about three feet, bobbing up and

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

down, and causing the wings to make an extraordinary noise resembling the rustling of a piece of new silk; then he would suddenly turn round and round, and every few seconds make quite an unusual sound, resembling the faint croaking of a frog. The ordinary note of this bird is a very loud rasping-like screech, and resembles a prolonged guttural "y-a-s-s," which is repeated twice, followed by a lengthened interval of sometimes fully half an hour or more. Adverting to the nest again, from which the set under notice was taken (data No. 557), I would like to explain that its construction was entirely the work of the hen bird, and we never yet saw a male near a nest during building operations, or even afterwards when the female was sitting. She is not fed by the male while on the nest, as far as I could see, but has to go and feed herself, and perhaps this is another reason why so many snake skins are placed on and around these structures, for it seems quite feasible when we take into consideration the fact that they have to leave them for such a long time during their hunt for food. This makes it appear more evident that the skins are really utilized as a means of protection, as already stated, and not for decorative purposes. I have known the hen to leave the eggs at 10.30 in the morning, and not return till nearly noon; this I witnessed in company with W. McEnerny before we took the other set of 2 eggs on the 20th of November; and when she returned after our long wait he climbed up the pole to the nest, and she actually allowed him to put his hand right upon her before she flew off again. The hen leaves the nest between ten and eleven in the morning, and goes to feed, and then again between four and five o'clock in the afternoon. The reason I used a long pole, secured with ropes, in the scrubs when robbing the nests of this Bird of Paradise, was simply because the trees in which the nests were placed were always enveloped from the bottom to the top in such a mass of tangled growth of the sharp and treacherous Barrister (*Mezoneuron Scortechinii*) and Lawyer vines (*Calamus australis*), that they were rendered quite impossible to negotiate in the ordinary way. Two nests found were built on top of *old ones* of the same kind, and another was placed eighteen inches away from the new nest; this proves that they certainly build year after year in the same tree. The nest under notice, which contained the set of eggs taken on the 2nd of November, 1899, was composed of leaves and great quantities of the green climbing fern (*Polypodium serpens*) already mentioned, being neatly lined with thin glossy fern stems, also fine vine tendrils, and festooned with cast off snake skins. It measures 10½ inches across (when green); egg cavity 3¾ inches across, and 1¾ inches deep; depth of nest, overall, 5 inches. We also saw these birds in the rich Don Dorrigo scrubs of N.S.W., in October of 1898, but did not succeed in finding any trace of their nests there.

558	55	2

VICTORIA RIFLE BIRD OF PARADISE.

Ptilorhis victoriæ, Gould.

(This bird was named after our late Queen Victoria).

This is a very handsomely marked set of 2 eggs, which were taken by R. Hislop in the scrubs of the Bloomfield River district, North Queensland, on the 14th of September, 1898. They are very like those of the latter species, only these are smaller. They have the same beautiful flesh ground colour, and are marked with the longitudinal streaks of reddish and purplish-brown, being superb specimens. Like the latter species this bird also uses large quantities of cast off snake skins (*epidermis*) in the protective decoration of its nests. (See A. J. Campbell's book, at foot of page 75). This handsome species frequents the dense scrubs on the coast of North Queensland, the Bloomfield River district being about its northern, and the Herbert River scrubs its southern limits. It seems to build very often in the Fan Palm (*Pandanus pedunculatus*), right at the trunk of the tree where the fronds join, and is sometimes well hidden amongst the fibre, the nest being placed much lower down, than that of the large Richmond River species of North-eastern New South Wales. I received this rare clutch through the courtesy of A. J. Campbell, of Melbourne. I look forward with very great pleasure to some day visiting the haunts of this handsome bird in the Bloomfield River district, also the Barnard Islands of tropical Queensland, as well as the far northern representative, *Ptilorhis alberti*, which is to be found inhabiting the rich scrubs near Cape York, at the extreme northern part of that State. Specimen A. of the set measures = 1·22 × 0·87. Specimen B. measures = 1·24 × 0·88.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
559	56	2

ALBERT RIFLE BIRD OF PARADISE,

Ptilorhis alberti, Elliot.

(This bird was named after the late Prince Albert-Consort).

This handsome clutch of 2 eggs was taken in the rich tropical scrubs at Cape York, North Queensland, by H. Barnard, on the 26th of November, 1896. They are of a creamy-buff ground colour, and *not a flesh tint*, as is the case with those of the two previous species. They are beautifully streaked, longitudinally, with brownish-olive and rufous-brown and pale slate; the markings being so long, and gradually tapering to a point towards the smaller end of the egg, as to naturally make the uninitiated conclude that an artist had been trying his small brushes on them. The markings on all the eggs of the Birds of Paradise, consist of these same strange streaks, which look decidedly artificial. The eggs of this bird are much more rounded, and less pointed, than those of the two preceding species, and like *Ptilorhis victoriæ*, this one also builds its nests down very low, so they may frequently be reached with the hand from the ground. H. Barnard found no less than fourteen of these nests in the scrubs at Cape York during season 1896-7, and this goes to show that the birds must be very plentiful there. Several of the nests found were only placed at a height of from six to ten feet. I have seen the nest of the New South Wales species (*Ptilorhis paradisea*) built nearly fifty feet from the ground. Specimen A. has thicker and longer streaks on it than specimen B. (as will be seen by the accompanying illustration of these two eggs), and measures in inches = 1·29 × 0·94. Specimen B. measures in inches = 1·28 × 0·96.

EGGS OF THE ALBERT RIFLE BIRD OF PARADISE.
(Nearly natural size.)
(*Clutch data No. 559.*)

Drawer O.

560	30	2

BOOBOOK OWL,

Ninox boobook, Latham.

(With notes on the Chestnut-faced and Powerful Owls).

Set of 2 eggs, which was taken by T. A. Brittlebank from the hollow spout of a dead tree near Myrniong, Victoria, on the 9th of October, 1896. Owls eggs are exceedingly difficult to procure, owing to the fact that the birds only leave the nest at night, it being always placed in a hollow portion of a tree. Out of the fourteen species known in Australia, the eggs of only six or seven of them have been so far described. Of the set under notice Specimen A. measures = 1·73 × 1·50 Specimen B. measures = 1·77 × 1·50. This is the bird that cries "more-pork" at night, and *not* that broad flat-billed bird, the Frog-mouth (*Podargus*), as is generally supposed by so many people. Boobook is probably another appellation for its "more-pork" note, and hence the name. We have frequently hunted this Owl from hollows of trees in the Clarence River district during our peregrinations, but never once did we find its eggs. On the 11th of November, 1906, I found a nest of the Chestnut-faced Masked Owl (*Strix novæ hollandiæ castanops*), Gould, in the bush near Lindfield, only eight miles from Sydney. It was placed three feet down the hollow trunk of a Spotted Eucalypt (*Eucalyptus*

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			maculata), at a height of 20 feet, and contained two young birds. It seems very remarkable that the nest of this Owl can be found so near Sydney, and yet its eggs are undescribed. Strange to say a Crow's nest, containing young birds, was situated in a Spotted Eucalypt only 20 yards from the Owl's nest, and was placed at an altitude of nearly 90 feet. We frequently came across the Powerful Owl (*Ninox strenua*), Gould, in the scrubs of the Clarence and Richmond River districts of N.S.W.; and during October of 1893 I found a large portion of white egg shell on the ground beneath some large dead trees that stood in Alipou scrub at South Grafton, at a part where these birds were always to be found roosting. I have no doubt that the shell belongs to this species, and judging from the shape and size of it, a perfect egg would be about two inches long. I have frequently seen these powerful birds with opossums and kangaroo rats in their talons, as they were feeding in a thickly foliaged tree, which they would handle and crush as if only mice. Passing by, looking up at them as they are feeding or roosting, they assume quite a supercilious expression as they peer down upon you with those large bright yellow eyes, which follow every step you take. The note or loud screech of this Owl is most extraordinary, and on a still night can be heard a long way off; it is such a *sudden* scream, that it naturally alarms those within hearing. While camped at Booyong scrubs, near Lismore, N.S.W., in 1899 and 1904, I often heard it, but rarely before midnight. The information I obtained from the people living in the latter scrubs was really very amusing; some told me quite seriously that it was the cry of the "Porcupine," while with others it was the "Bunyip." The aborigines of the Clarence and Richmond River districts explained to me, with much gesture, that it was the cry of the "big one debil debil." These blacks are very superstitious, and prefer camping in the open bush or forest, having a decided dislike to go in or near the scrubs.
561	41	3	LESSER MASKED OWL, *Strix delicatula*, Gould. Set of 3 rare eggs, which were taken from the hollow spout of a Eucalypt on the banks of the Nicholson River, Gulf of Carpentaria, North-west Queensland, by C. Woodlands, on the 4th of October, 1897. Specimen A. measures = 1·64 × 1·39, and is a little larger than the other two.
562	431	3	TAWNY FROGMOUTH, *Podargus strigoides*, Latham. (This bird is known to the aborigines of the Clarence River district as "Car-bud.") Splendid set of 3 eggs, taken near South Grafton, N.S.W., by Frank and Sid. W. Jackson, on the 21st of October, 1894. The nest was placed on the horizontal branch of a dead Bloodwood Eucalypt (*Eucalyptus corymbosa*), at an altitude of 30 feet, and as usual the surroundings accurately harmonized with the color of the bird. This peculiar frog-mouthed bird builds a scanty, flat, and exposed nest of thin sticks, which is placed on the forked limb of a tree. It generally selects a dead one, the same color as the bird, which is grey. When sitting on the nest it is most difficult to see, and during the day remains perfectly motionless with its eyes closed, if danger is near, and, stretching out its beak, makes its body appear perfectly straight, exactly like a broken dead stick lying across the nest. Like most of the nocturnal birds, its eggs are pure white, and the young ones, which I have frequently found, resemble, on leaving the eggs, balls of beautiful white down. The notes of this bird, which is so often erroneously called the "More Pork," are of a smothered or ventriloquous sound, and are rapidly kept up for twelve or fifteen seconds, resembling—"uh-uh-uh-uh-uh-uh," and are not unlike the plaintive notes uttered by the Painted Quail (*Turnix varia*), only they are much more rapid. The fully fledged young birds I have often seen asleep in the trees, and as their plumage is of a rich tawny colour, not grey as is the case with the adult specimens, they resort to darker limbs. During December of last year (1906) I found four young birds, sitting one behind the other, in a Red Ironbark Eucalyptus (*Eucalyptus siderophloia*), and their protective coloration so nearly resembled the dark bark upon the branch of that tree, as to render them scarcely distinguishable from it. The eggs in this clutch are very elongated, and Specimen A. measures = 2·01 × 1·23.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
563	430	1	PLUMED FROGMOUTH, *Podargus papuensis*, Q. and G. Set of one egg, which was taken by R. Hislop, in the Bloomfield River district, North Queensland, on the 11th of October, 1895. One egg forms the full sitting for this species. It measures = 1·86 × 1·23.
564	430	1	Data same as latter egg. Taken on the 16th of November, 1895. This specimen measures = 1·76 × 1·24.
565	432	2	FRECKLED FROGMOUTH, *Podargus phalænoides*, Gould. Set of 2 eggs, which was taken near Burketown, Gulf of Carpentaria, North-west Queensland, by E. Drew, on the 30th of November, 1897. Specimen A. measures = 1·76 × 1·23.
566	—	2	TASMANIAN FROGMOUTH, *Podargus cuvieri*, V. and H. (See specimen 41, Gould's Handbook to the Birds of Australia. A. J. Campbell includes this with 431.) Set of 2 eggs, which was taken near Circular Head, Tasmania, by H. Ross, on the 17th of October, 1898. Specimen A. measures = 1·86 × 1·24.
567	433	2	MARBLED FROGMOUTH, *Podargus marmoratus*, Gould. Set of 2 eggs, which was taken at Walwa, on the Kennedy River, Cape York Peninsula, North Queensland, by W. Burton, on the 2nd of October, 1900. Specimen A. measures = 1·54 × 1·21
568	434	3	LITTLE NIGHTJAR, *Ægotheles novæ-hollandiæ*, Latham. Set of 3 eggs, which was taken from a hollow spout in a giant Red Eucalypt (*Eucalyptus rostrata*), situated near Alipou scrub, South Grafton, N.S.W., on the 20th of September, 1897, by Sid. W. Jackson and an aboriginal named Nymboi Jack. We frequently saw this pretty little frog-mouth bird pop its head out of the hollow, or hole, in a tree while my brother was busy chopping steps and climbing. The accompanying photograph shows the position of the hollow, from which the eggs were taken, by the white cross, and Nymboi Jack coming down the tree. Specimen A. measures = 1·12 × 0·87. The first nest of this species which came under my notice, was found by me in a hollow

Aboriginal, Nymboi Jack, coming down from the nest of the Little Nightjar. The cross denotes the limb from which the eggs were taken.

Loc., South Grafton, Clarence River, N.S.W.

(See data No. 568.)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			tree at the foot of a mountain, during the visit of our party to the Monkey Water Holes, below Picnic Point, near Toowoomba, Q., in October of 1883, and I have very good reason never to forget it, as we had quite an exciting experience during that trip. One night, after a long day's rambling in the scrubs and mountains, we retired in real camp-life fashion, all rolled up in blankets and huddled before a big fire, which had been made on the flat rock in the bed of the creek, which was apparently quite dry. All went well until midnight, when a terrific explosion was heard, which sent red hot ashes, stones and large pieces of wood in all directions, but fortunately no person was injured beyond receiving a few slight burns from scattered embers. We were all at a loss to know what had happened, though the whole thing looked as if there had been a serious mishap; however, on examining the place where the fire had been made, we found that the top of the rock was actually blown away, leaving a hollow receptacle beneath containing boiling water; so that, before making our fire, it must have contained quite a quantity of *aqua pura* to generate sufficient steam to shatter the hard rock in this way, for it was over six inches thick. This flat rock, which formed the bed of the creek, was evidently full of these hermetically sealed cavities containing water, the latter gaining access by gradual and constant percolation. The creek also contained numerous large round cup and water-bottle shaped holes, many of which no doubt were originally hidden inside the rock. I always remember my first nest of the Little Nightjar from this incident, though needless to say it was no little "night jar" to us.
569	434	2	Pair of eggs, which were taken by Geo. Savidge, near Copmanhurst, Clarence River, N.S.W., on the 16th of September, 1895. When the eggs of this species are rolled together, they give off a harsh sound, as if made of unglazed china, such as we often find outside the bottom of a teacup. Specimen A., which is rather pointed, measures = 1·12 × 0·84.
570	429	1	SPOTTED NIGHTJAR, *Eurostopus guttatus*, V. and H. Set of one egg, taken on the 18th of September, 1898, from a stony and thickly timbered ridge near Lavadia, South Grafton, N.S.W., by Sid. W. Jackson. The egg was simply laid on the bare ground, and I flushed the bird off it as I walked along. This is the second egg I have taken near South Grafton of this species. It measures = 1·27 × 0·92.
571	428	1	WHITE-THROATED NIGHTJAR, *Eurostopus albigularis*, V. and H. Set of 1 egg, which is a beautiful specimen, and was taken by Frank and Sid. W. Jackson on a ridge behind Morris's orchard, near South Grafton, Clarence River district, on the 25th of December, 1897. This ridge is very gravelly, and covered with several species of Eucalyptus trees, while strewn about are numerous stones of a very curious iron-band formation. The birds breed in this locality every season, and we have found several of their nests, each containing a single egg. Like that of the preceding species, the egg is simply laid on the bare earth or gravel, and the ground colouring is of a rich cream, not of a greenish tinge as is the case with *Eurostopus guttatus*, being sparsely marked all over with spots of dark purple. Nymboi Jack, the aboriginal who collected for me at different times in the Clarence River district, found three eggs in the bush near Nymboida. I have often hunted these birds off the ground in the bush at Roseville and Chatswood, near Sydney. The egg under notice measures = 1·62 × 1·15.
572	427	2	LARGE-TAILED NIGHTJAR, *Caprimulgus macrurus*, Horsfield. Splendid set of 2 eggs, which was taken at North Queensland, by one of A. J. Campbell's correspondents there, on the 1st of August, 1898. I saw these birds in the scrubs of the Richmond River district during 1899, but found no eggs. Specimen A. measures = 1·14 × 0·82. Specimen B. = 1·14 × 0·85.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
573	416	1

LYRE BIRD OF NEW SOUTH WALES,

Menura superba, Davies.

(This bird is known to the aborigines of the Clarence River district as "Tar-win.")

The usual clutch of one egg, which in this case is of the dark purplish-grey variety, and rather finely spotted all over. It was taken by Sid. W. Jackson on the 2nd of September, 1905, in the jungle-like scrub in a beautiful fern-clad gully, where the timbers of the scrub and forest met and intermixed, at the head of Middle Harbour, near Lindfield, Sydney. The nest was built upon a ledge of rock, and placed up against another, which was covered with moss and lichen. Immediately behind it stood a tall Spotted Eucalypt (*Eucalyptus maculata*), also a Grass Tree (*Xanthorrhœa arborea*), and this was where the scrub fringed the edge of the forest. From this spot the bird must have obtained a splendid view as she sat in the nest, for it was placed in such a commanding and elevated position. The wild and rugged gullies on the north side, at the head of Middle Harbour, afford very natural and safe retreats for these beautiful birds; the reason being simply because they are seldom frequented by persons other than those interested in natural history, etc.; also owing to the fact that in these almost inaccessible places quantities of rich dense vegetation abound, in which the birds live and procure their food. The photograph, which illustrates the nest under notice, and from which the egg was taken, will be found a few pages further on, and it faithfully depicts the nest with all the natural surroundings. I experienced some difficulty in taking this photograph, owing to the fact that the nest was above me, when I stood in front of it; and to get my camera fixed to the required height and horizontally in line with the nest, I was obliged to build up cairns of stone to rest the legs of the tripod on; ultimately, however, an exposure of six seconds was made, and secured me a satisfactory picture for my labors. A good idea as regards the size of the nest can be obtained, for the Eucalyptus tree which is standing immediately at the rear of the structure, is instrumental as a scale, measuring exactly one foot in diameter. Accompanying this description will be found a natural sized photograph of the egg, which measures in inches = 2·54 × 1·80. In the data of the following egg (No. 574) of the Lyre Bird, I am giving full particulars respecting its habits, etc.

EGG OF THE LYRE BIRD (*Menura superba.*)
(Natural size.)
(*See data No. 573*)

574	416	1

One egg, which forms a clutch, and is of the light stone-grey variety. It was taken by myself in the Ourimbah scrubs, near Gosford, N.S.W., on the 29th of August, 1904, and measures in inches = 2·38 × 1·77. The nest was, as usual, a very large dome-shaped and unpretentious looking structure, composed of sticks, bark, dead ferns, dead leaves, and flakes of moss, which the birds had scraped and gathered from the rocks in the damp gully, and was picturesquely situated amongst ferns on the ground, at the foot of a giant Turpentine Tree (*Syncarpia laurifolia*). I have found several nests in the latter scrubs, which afford a natural and beautiful retreat for these interesting birds. It is ideal Lyre Bird country, and I have traversed it on foot for many miles; every gully has its rippling water course; towering Eucalypts rise from a tangle of vines, fern trees, and sub-tropical undergrowth, so thick that the sunlight barely filters through, and here the retiring bird disports himself in peace and comparative security. The casual observer, if asked to name one out of the many feathered inhabitants of the Australian bush as especially deserving of distinction, might find some difficulty in arriving at a decision,

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

for from the tiny Blue Wren to the gorgeous Rifle Bird of Paradise, the range of bird life is so wide and varied, as to render such a choice extremely difficult. If, however, there is such a thing as an aristocracy among the birds, for distinction, that is not merely based on fine feathers or sweet notes, the palm should certainly be accorded to the Lyre Bird, as his handsome yet not garish plumage, his retiring habits, exacting selection of the loveliest localities wherein to live and breed, and unique accomplishments of mimicry and vocalisation, render him a type apart from all others, a very patrician amongst his feathered kindred. Though the Lyre Bird is not a common sight in the scrubs, his rarity is only apparent as the result of the shy seclusion in which he so jealously keeps himself, for in reality these beautiful natives of thick forest, or jungle and tangled gully, are by no means scarce. Of the three species, this one under notice ranges through the eastern, central, and coastal districts of New South Wales, from Monaro northwards to New England and the Clarence River, and as far west as the Jenolan Caves. In my early ornithological days, I once found a Lyre Bird's nest on the face of a low cliff in the mountains, and did not then know to what the find really amounted; not having time to return, the problem remained unsolved, until, with later discoveries, it was finally cleared up. One condition equally applies to all the nests of the Lyre Bird, and that is the difficulty attending their discovery. If a ledge of rock is chosen, there is generally no path to it, or one that lures the hunter to risk his neck to very little purpose; should, however, the nest be built on the ground, it will generally be in such a tangle of undergrowth that its discovery is little more than pure chance. Experience teaches me that the one prominent characteristic of this handsome bird is shyness; he loves not the open forest, and is unknown on the plain. But where the scrub is dense, where palms and tree ferns join their arching fronds in cloistered aisles of greenery, and where the mountain stream ripples through the boulders of deeply buried creeks, there, above all places, you will find the Lyre Bird, or, at any rate, the evident traces of his tenancy. But if you want more than a glimpse of him, you must watch patiently in his haunts, and move with the velvet footfall of the cat, for the snapping of a stick when perhaps close upon your quarry, will result in suddenly hearing his whistling call a hundred yards away, and the whole "shikarri" has to be done over again. Though a very poor flier, the bird is the swiftest feathered runner of the bush, and will cover the distance through the thickest scrubs in seconds, as against the minutes of his clumsy pursuer, without lifting a wing. The breeding haunts and habits of all birds generally indicate their main characteristics, and this is particularly the case with the Lyre Bird, in fact, his cleverness in eluding discovery, or baffling pursuit, and wonderful powers of mimicry, will never be appreciated by the observer till he has followed him through miles of tangled undergrowth, stumbled over boulders and logs, screwed round ugly corners on bluff or cliff, and splashed through foliage-shrouded creeks in search of him, while all the time that deceptive cry is ahead, or seemingly so, for, like most mimics, the bird is by instinct a ventriloquist.

Everything tends to difficulty in making and recording reliable observations of the breeding habits of this interesting bird; the period of incubation is unusually long, extending up to five or six weeks, during which time the hen does not rely on her mate for food, but like the Rifle Bird of Paradise (*Ptilorhis paradisea*), she leaves the nest in search of it, and the feeding ground is often at a considerable distance away from the nest, near which, strangely enough, the male bird is never seen after the egg has been laid. This last curious fact was borne out by my own observations, and probably by many other naturalists. Then, again, the young bird does not leave the nest for eight or ten weeks after hatching, which is altogether an abnormal time compared with that similarly employed by other poor or non-flying birds; the habit of the entire family, therefore, is not merely shyness but absolutely secretiveness, for they are endowed with the gift of noiseless movement, slipping through or over the ruffle of sticks and leaves without a crack or rustle, while the hunter or observer has to be very quick to get even a glimpse of the bird. They often make some extraordinary jumps, and Prince Albert's Lyre Bird (data No. 576) frequently jumps eight or ten feet from the ground into a convenient branch of a tree, and, like the other two species, it continues to ascend in successive leaps, until it has attained a sufficient elevation to enable it to fly, or gently float, down into the gully below.

NEST OF THE LYRE BIRD (*Menura superba*).
The Eucalyptus tree, which is standing immediately behind the structure, is instrumental as a scale, for it measures exactly one foot in diameter.
Loc., near Lindfield, Middle Harbour, Sydney.
(*See data No. 513.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

The ordinary cry of the Lyre Bird (*M. superba*) is a whistling "che-ock che-ock," though to set down on paper anything that correctly represents it is practically impossible. Those who know will recognise the description; but this cry is frequently followed by a burst of mimicry, in which the notes of all surrounding birds follow with bewildering rapidity and exactness. I often sat and patiently listened to it giving one of its concerts, and was greatly surprised with the accurate reproductions, especially with those of the Harmonious Thrush and Coach-whip Bird, the clear ringing notes of which were simply perfection. Here again the knowing bushman will at once understand that there is not, as might appear, a full rehearsal by forest songsters specially arranged for his benefit, but that the sound proceeds from a feathered humourist, who, either from sheer love of varied notes, or to deceive his natural enemy, is giving proof of his wonderful powers. I found that this mimicry is not alone confined to the calls of birds, but any other local sound or noise will serve as something to imitate. The distant thud of a woodman's axe, the rattle of hobble chains, the clink of the saddle-carried pannikin, the howling of the dingo, and even the painful screeching of the sharpening or filing of a bushman's cross-cut saw, are included in his repertoire. If a settler's homestead is near, the Lyre Bird will also mock to perfection the crying of a child, the crowing of the cocks, the cackling of the hens, the barking of the dogs, and various other domestic sounds; anything, in fact, of the nature of a bush sound, will be picked up and repeated with wonderful exactness. At Port Hacking, south of Sydney, I have heard it very accurately imitate the peculiar squeaking sound produced by the rowlock of a rowing boat, which the bird frequently has the opportunity of hearing, as boats pass up and down the many small branches of that sheet of water. When camped at the Don Dorrigo scrubs, in October 1898, and at Booyong, in the Richmond River scrubs in 1899, we frequently heard these birds. Every morning, with the first peep of the dawn, the reveille was sounded by one of them in the dense scrub near the camp, which was thick with undergrowth and vines, whilst underfoot the fallen leaves made a soft carpet, over which it should have been easy to stalk our game noiselessly. And yet at times we scarcely got sight of even a tail feather, but always that delusive call, now ahead, now to the right, and now apparently behind again, until one could only conclude that the bird was thoroughly enjoying a game of hide and seek. His traces were always plentiful; the leaves and sticks being raked over for food till the ground looked like a barnyard at feeding time; doubtless, many a luckless snail had been hooked out of his moist hiding place to furnish a tit-bit for the handsome pair that wandered and wooed in the lovely spot. As is the case with the handsome Dragoon Bird (*Pitta*) of our northern scrubs, the snail-stone is, by the way, another Lyre Bird trace; in the midst of his vocal efforts the bird will pause to "wet his whistle," and the listener may then often hear a sharp tapping or chipping; this is the *Menura* smashing a snail shell on the domestic altar, and a little search will frequently reveal the snail-stone, with the shell debris of past feasts scattered around it. The bird is a ground feeder; worms, grubs, centipedes, beetles, and larvæ furnishing his daily menu; hence, during the year of 1903, towards the end of a protracted drought, his tribe was found in larger numbers than usual in the few gullies retaining moisture in the impervious shade; the demands of hunger will, in fact, overcome his non-gregarious habit.

Mimicry and ventriloquism are not, however, his sole accomplishments; he is a bird of parts, and has his particular play-ground, where he will tread a solitary minuet with the daintiest of airs and paces. This is a thing seldom witnessed, for the *Menura* will only disport himself thus when absolutely undisturbed. Still, his playground, like that of the Bower Bird, is by no means uncommon, though, as indicated, the observer will seldom be lucky enough to sneak on the bird without that fatal sound which will at once bring the solitary performance to a close; and it is nearly always solitary, though sometimes the mate shares in its fantastic coquetry. A single stick, or a little pile of twigs, or a few bright leaves set in the middle of a clear hollowed-out patch, provides a sort of dummy *vis-a-vis*, and here he will prance, bow, and set to corners with a graceful abandon, betraying intense and self-complacent enjoyment, all the time keeping up his wonderful mimicry. This queer habit of the solitary dance must have a cause, though as yet no explanation of it has been adduced. It was only

Data No.	No. in A. J. Campbell's Book	No. of Eggs.	

once that I had a really good chance of witnessing it, and that was in the Don Dorrigo scrubs of N.S.W., in October of 1898, and I enjoyed the privilege to the full, till an incautious movement made the Lyre Bird turn his bright black eyes in the direction of my hiding place, and the whole show was spoilt in an instant, the performer vanishing like magic. Possibly it is a rite practised chiefly at breeding time; at any rate, it is a matter for observation and conjecture.

The *Menura*, I find, is of a wandering disposition, and traverses the scrubs and mountain sides from one end to the other, frequently covering several miles in a day; but always returns to its familiar locality to roost. In the rocky and thickly timbered gullies of Port Hacking and Middle Harbour, near Sydney, I have often seen them, and also found their nests. One can scarcely imagine it possible for these shy birds to frequent localities so near such a large and busy city as Sydney, with its population of over half a million. No doubt the birds are hemmed in and so surrounded by settlement in the latter locality, that they cannot move on, and so there they can remain in safety in their natural haunts, for many years yet to come. Their breeding season is, in point of distinction, in keeping with other facts connected with their unique habits. Unlike the rest of the birds, they mate and nest in the winter, though in the colder regions of Mount Kosciusko, southern New South Wales, where heavy snow may be expected at midwinter, they will not build till somewhat later; it amounts to the same thing, because all the other birds are also proportionately later in assuming the care of a family. As the *Menura* is a non migrant, it is difficult to assign a reason for the choice of the cold season for his courtship and housekeeping, save, perhaps, that as his food is procured chiefly from the ground, his instinct leads him to arrange that the greatest call for it shall come when the soil and its carpet of dead leaves are not only moist with winter rains, but teeming with worms, pupa, and larvæ. The building of the nest is generally commenced about the middle of May, and the laying of the single egg takes place in June, July, or August; consequently, with the long period of incubation, and the still longer one during which the young bird remains in the nest, the actual appearance of the latter may not be looked for until the end of September or October, and, at that time, he will be quite capable of supplying all his own wants. The young soon die if kept in captivity.

Large as the nest is, the bestowal of a brood parent of the size and shape of the female *Menura* is a matter calling for no little management; the successful watcher will, therefore, note that when returning from her feeding the hen enters the nest head first, and then turns to face the aperture, the long tail being either disposed of sideways or curled along the back. The eggs of this bird vary considerably in size, shape and colour; some I found were of a very light stone, others purplish, reddish-brown, and the most remarkable was of a uniform dark metallic blackish-brown, approaching to nearly black; and was the darkest egg I have ever seen. The specimen accompanying this description is of the light stone-grey variety, while the former egg (data No. 573) is of the dark purplish-grey variety, and somewhat resembles a large ripe passion fruit. The ruthless and senseless destruction of the Lyre Bird, for the sake of the tail feathers, has to a certain extent diminished its numbers; it is a piece of vandalism only too common, and all lovers of bird and beast should do their best to prevent it. Near Stroud, in the Gloucester district, north of Newcastle, N.S.W., a few years ago, a party of hunters killed over 400 birds for the sake of securing their tails, which they afterwards put on the market in Sydney and elsewhere. The Birds' Protection Act is absolutely useless when such a thing as this is so openly carried on. The action of the trustees of the National Park of New South Wales, in preserving the native birds in that beautiful tract of virgin country, cannot be too highly praised, and should receive every support from the general public; it is there the various birds needed to brighten the suburban districts will have a chance to breed, and amongst them is the Lyre Bird (*Menura superba*), which will add a piquant interest to the beauties of the forest, gully, and stream.

574A	416	1	Clutch of one egg, which is of the dark variety, and was taken by T. Curtis, C. Reid, and myself in the scrubs situated between the mountains near Waterfall, some thirty miles south from Sydney, on the 15th of August, 1904. Being anxious to make a special study of this species, we three congenial souls were drawn into the latter locality, where we prosecuted the one common hobby, and delighted

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

in perusing that open book, which the Australian bush is to an intelligent reader. We saw the birds often, but only for a few seconds, and desired a closer and more satisfying acquaintance, that would leave no points in doubt as to their jealously secluded haunts and breeding grounds. We got what we wanted, at the cost of patient search, still more patient stalking, and many disappointments, which, however, only rendered final success more satisfying. The nest found during the trip in question, was located in an old burnt-out stump in a steep and rugged part of the gully. It was in point of size and construction exactly typical, measuring 32 inches long by 20 deep, being, as is always the case, domed, with an entrance at one end, and constructed of Eucalyptus leaves, sticks, moss, ferns, etc., and lined with fine roots, soft bark, and feathers plucked from the breast of the bird itself. These nests, in all instances, afford illustration of instinctive provision against detection, their structure being untidy and the egg so dark-coloured that both are unlikely to attract attention; thus the passer-by or the predatory snake has less chance of seeing and despoiling the nest. Great was our jubilation at the find, and my exultant shout brought the rest of the party tumbling over the rocks, and blundering through the "wait-a-bit" vines to view the prize. One handsome egg, resembling very much a large, ripe passion fruit, lay in the nest, but so dense was the shade, and so dark the colour of the egg itself, that it was not visible except on very close inspection; as for the nest, it looked like anything but what it was. Encouraged by success, we started to locate another if possible, and were fortunate enough to find one built in different but representative surroundings. The bird generally nests on the ground, at the end of an old log, or in a clump of tree ferns, etc., or on the shelving ledge of some nearly inaccessible bluff of rock. It was in the last named locality that we found the second nest (see photograph) and realised that without ropes it would be impossible to reach it, in fact, under any circumstances it would be a break-neck sort of venture; I, who had toiled all the day, and grumbled much under the burden of a heavy camera, now felt with the second discovery a fuller justification for my existence, but I soon realised that it was more than difficult in such precipitous country to get a place from which the nest could be photographed. There was nothing for it but a tree, and with many misgivings I was hoisted, shoved, and propped into an eminence in the slippery fork of a Eucalyptus, whence, under a running fire of gratuitous advice from the rest of the party, I finally made an exposure of three seconds, and secured the picture here reproduced. I have frequently noticed that these birds rebuild their old nests year after year, if they have not been tampered with, or previously robbed. The egg under notice measures in inches = 2·44 × 1·70. Some of these

NEST OF THE LYRE BIRD (*Menura superba*),
Built upon a ledge of rock on the face of a cliff.
(One tenth of the natural size).
Loc., Waterfall, near Sydney.
(*See data No. 574A.*)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			eggs, taken in the thick scrubs in the mountains at the head of the Hunter River, near Belltrees, north-east of Scone, N.S.W., are very light in the ground colouring, and two lately examined by me from that locality resembled *very light* and washed-out specimens of those of the Crested Sea Tern (*Sterna bergii*).
575	417	1	QUEEN VICTORIA'S LYRE BIRD. *Menura victoriæ*, Gould.

One egg, a clutch, which is a very long and pointed oval, and different to the three eggs already mentioned of the previous species. The ground colour is of a light purplish-grey, blotched with dark-brown and purplish-slate. The shell is minutely pitted all over. It measures = 2·51 × 1·62, and was taken at Gippsland, Victoria, on the 2nd of July, 1889, being forwarded to me by James A. Kershaw. The egg is very like some specimens of those of *Menura superba*, only it is more pointed at one end, and the pittings on the shell are more pronounced. The bird is found in Victoria, and has also been frequently seen in the south-eastern portion of New South Wales, just across from the Victorian border. Both this and the previous species are very similar, and the casual observer can scarcely distinguish between them, as the general plumage of both is so much the same. In Victoria the brutal tail hunter is also in evidence, and is still to be found pursuing his work of destruction, notwithstanding the provisions of the Game Act, rapidly exterminating this beautiful Australian bird. It is time to check the ruthless destruction of bird life in Australia by the enactment and enforcement of *proper* laws. A crusade against bird destruction should be organized to traverse our continent, and progressive educators should inaugurate courses of natural study in our schools, which would include object lessons in bird life. The surest way to promote this sentiment of bird *protection* is to induce our people to study the birds, and then they will find their incalculable benefits to mankind. Apart from human foes, I understand the introduced Red Fox is playing havoc in Victoria, and the many bundles of blood-stained feathers of the Lyre and other birds which he leaves behind, bear testimony of what this plunderer feeds upon.

576	418	1	PRINCE ALBERT'S LYRE BIRD. *Menura alberti*, Gould.

One egg, a clutch. These eggs are becoming exceedingly rare, as the splendid Richmond River scrubs of New South Wales are so rapidly being cut down and destroyed. They have been the stronghold and natural habitat of these birds for many years past, and before very long this interesting species, which is already a *rara avis*, will be for ever lost to us. I found five nests while in the Richmond River scrubs at Booyong, in 1899, but only succeeded in getting an egg from one of them, and that was very heavily incubated and difficult to blow; the other four nests were very old ones, and, of course, "blanks." The egg is a fine specimen, somewhat pointed at one end, while the ground colour is of a rich purple-grey, and the extreme end of the larger apex possesses a dark cap of deep purplish-brown, with a few darker markings; over the remainder of the egg are evenly scattered smaller markings of the same colour. In general appearance it is quite different to those of the other two Lyre Birds. The nest, which was built on top of that of the previous season, was as usual roughly constructed and dome-shaped, and was placed on the ground between the buttresses or spurs at the foot of a giant Large-leaved Fig tree (*Ficus macrophylla*), a sample of which is shown in a photograph

PRINCE ALBERT'S LYRE BIRD (*Menura alberti*), Gould,
Showing the tail feathers, which are different to those of the other two species.
(About one-eighth of the natural size).
(See data No. 576.)

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

further on. The egg measures in inches = 2·42 × 1·64, and was taken at the Booyong scrubs, in the Richmond River district of N.S.W., by W. McEnerny and myself, on the 6th of October, 1899. This bird is distinct from the other two, though its habits and haunts are similar; the side feathers of the tail are shorter, and the bar markings observable in the case of *Victoriæ* and *superba* are entirely absent, whilst the two central feathers, narrow and prolonged, cross each other at the base, curve outwards at the tip, and are webbed only on their external side. This bird, which frequents the scrubs between the Richmond River of north-eastern New South Wales, and the south-eastern parts of Queensland, has now become very rare. It was first located and described by the late John Gould, of London, in February of 1850; and the late James F. Wilcox, of the Clarence River district, found the first recorded nest and egg during August of 1852, in the Richmond River scrubs. The nest was placed on a rocky ledge, about 100 feet above the stream of the latter river, and was so difficult of access as to render its acquisition a task of no ordinary kind, the entrance being placed towards the rock. Whilst dealing with the subject of early discovery, it is interesting to find that the *Illustrated London News*, of March the 19th, 1853, contains J. F. Wilcox's account of its general habits, and the picture of the pair of Prince Albert's Lyre Birds on the opposite page, reproduced from the pages of that journal, serves to indicate the progress of Australian ornithology, and the advances made in depicting the facts ascertained by exact research. This latter nest and egg were transmitted to the British Museum by J. F. Wilcox in September of 1852, and since then few persons have been privileged to obtain the bird, and fewer still to discover its nest and egg. During my long stay in the Richmond River scrubs in 1899-1900, I often saw the birds, and had splendid opportunities of listening to their truly wonderful powers of mimicry, in which vocalisation I am inclined to think they surpass the other two species. It was only after some years of repeated disappointments that Dudley Le Soüef, of Melbourne, acquired the rare egg of this species, and in quite a round about way; for, during his visit to London in 1898, he was presented with an egg by the Hon. Walter Rothschild, which had been laid in his large private gardens at Tring, London, where many birds from various parts of the world are kept in captivity. Strange to say the egg in A. J. Campbell's collection, which was found in Queensland, also came from London, and was from the famous oological collection of the late Philip Crowley.

577 418 1 One egg, a clutch, which is of a very rich purplish-brown, covered with markings of the same, and a darker colour scattered all over the surface. It is much more compressed, and is not so pointed at one end as is the case with the latter specimen (data No. 576). It was found by Isaac J. Foster in the scrubs near Bangalow, Richmond River, N.S.W., on the 19th of September, 1899. The egg measures in inches = 2·34 × 1·72. See foot of A. J. Campbell's book, page 523, where he quotes this egg.

578 441 4

BROWN KINGFISHER OR LAUGHING JACKASS.

Dacelo gigas, Boddaert.

Splendid set of 4 eggs, which are very round specimens, and were taken from a hollowed-out nest of the white ant (*Termites*), on the side of the dead trunk of an Ironbark Eucalypt, in Foley's paddock, near South Grafton, Clarence River, N.S.W., on the 24th of October, 1897. The nest was placed about 40 feet from the ground, and in rather an awkward position to get at; so I climbed a tall Swamp Oak (*Casuarina glauca*), which stood about fifteen feet away, and on reaching across with a long scoop-fitted rod, successfully removed the four eggs, one by one, from the hollow. Taken by W. McEnerny and myself. This is the only set of four eggs of this species that I have ever taken, and found that two to three usually formed the clutch. I noticed that in the Clarence River district these birds never resorted to hollow branches and holes in trees for the purpose of breeding, unless there was an absence of the nests of the tree white ant in the locality; nearly all the eggs I have taken were laid in these ants' tree mounds or nests. The eggs are snow white when first laid, but they soon become dirty and nest stained. I have seen Jackasses killing snakes on several occasions, both in Queensland and New South Wales; they fly up with them, and let them fall from a considerable height. My first experience in this direction was during 1887, when driving along the road at Nundah, between Sandgate and Brisbane; I witnessed what appeared to me a very novel and interesting incident, viz., a pair

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			of Jackasses flying up into the air with a snake, which was about five feet long, and when at an elevation of fully 200 feet they let the reptile fall to the ground, killing it instantly, the birds following promptly and picking it up again. Only recently I have seen the Jackasses about the bush at Roseville, near Sydney, snake killing in the same manner. Specimen A. measures = 1·82 × 1·47.
579	442	3	LEACH KINGFISHER, *Dacelo leachii*, V. and H. Set of 3 eggs, which were taken near Maryborough, Queensland, by W. Burton, on the 28th of September, 1897. The first eggs I saw of this species were taken from a nest which had been made in a white ants' mound, on the trunk of a dead tree near Bundaberg, Queensland, during 1881; in the same tree there was also a Forest Kingfisher's nest, which contained five young birds. Specimen A. measures = 1·83 × 1·37.
580	446	5	SACRED KINGFISHER, *Halcyon sanctus*, V. and H. Set of 5 eggs, which were taken from the hollow limb of a Red Eucalypt (*Eucalyptus rostrata*), at South Grafton, N.S.W., on the 5th of December, 1894, by Frank and Sid. W. Jackson. This species we found resorting to hollow limbs when nesting, and not to the mounds of the tree white ant (*Termites*). Specimen A. measures = 1·11 × 0·87.
581	448	3	WHITE-TAILED KINGFISHER, *Tanysiptera sylvia*, Gould. Set of 3 eggs, one being a little smaller than the others, that were taken from a nest, which was simply an excavation tunnelled into a mound or hillock of the white ants (*Termites*), and placed about 18 inches up from the ground. The set was taken in the scrubs at Cape York Peninsula, North Queensland, during February of 1897, by H. Barnard. Specimen A. measures = 1·01 × 0·87.
582	444	5	FOREST KINGFISHER, *Halcyon macleayi*, J. and S. (This bird is known to the aborigines of the Clarence River district as "Jerry-dun-gun.") Set of 5 eggs, which were taken by Frank and Sid. W. Jackson near South Grafton, Clarence River, N.S.W., on the 4th of November, 1893. The nest was situated 30 feet high, in an ants' mound on the side of a forest Apple tree (*Angophora*). They are very pearly white eggs. We *always* found this species building in the nests of the white ant about Grafton, and not in hollow limbs. Specimen A. measures = 0·99 × 0·86.
583	445	5	RED-BACKED KINGFISHER, *Halcyon pyrrhopygius*, Gould. Beautiful set of 5 eggs, which were taken from a nest at the end of a tunnel, which had been formed in the bank of a creek. It was 3 feet 8 inches long, the eggs being placed in a neat chamber at the extremity. Taken by Sid. W. Jackson at South Grafton, N.S.W., on the 11th of September, 1898. This bird was very uncommon in the Clarence River district, and this is the first set of its eggs that I have ever had the pleasure of finding. Specimen A. measures = 0·95 × 0·86.
584	437	5	BLUE KINGFISHER, *Alcyone azurea*, Latham. Beautiful pearly white set of 5 eggs, which were taken by Frank and Sid. W. Jackson, in Sericornis Creek, a branch of the Little Murray River, near the Don Dorrigo scrubs, New South Wales, on the 10th of October, 1898. The nest was a small round cavity, similar to that of the latter species, and placed at the extremity of a tunnel in the bank of the creek, and was over four feet long. This handsome bird loves to dwell in the small fresh-water creeks that are well clothed and shaded with dense scrub-like vegetation. I have taken several sets of these eggs near Grafton. Specimen A. measures = 0·88 × 0·72.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
585	438	4	PURPLE KINGFISHER, *Alcyone pulchra*, Gould.

Set of 4 of these rare and pearly-white eggs. They were taken by my friend C. Woodlands, who, like E. Drew, has enriched this collection with many rare specimens from the Gulf of Carpentaria district of North-west Queensland. The nest was placed at the end of a tunnel, in the bank of a creek, in a thicket of small trees, on the banks of the Gregory River, North-west Queensland, on the 11th of September, 1896. Specimen A. measures = 0.88 × 0·73.

586	—	2	TASMANIAN KINGFISHER, *Alcyone azurea diemenensis*, Gould.

Pair of eggs, which were taken from a tunnel in the bank of a creek near Circular Head, Tasmania, by H. Ross, on the 17th of October, 1898. Three eggs were broken in digging out the nest, and these two escaped with slight injuries. Specimen A. measures = 0·93 × 0·73. Specimen B. measures = 0·89 × 0·73. (A. J. Campbell includes this with *A. azurea*. See Gould's handbook "Birds of Australia," Vol. i., page 141, spm. No. 70).

587	436	6	BEE EATER, *Merops ornatus*, Latham.

Fine clutch of 6 eggs, which are very round and pure white. Taken by Frank and Sid. W. Jackson, at Gerrymberrym, near South Grafton, Clarence River, N.S.W., on the 3rd of November, 1893. The nest was placed at the extremity of a tunnel (4 feet long) dug into the sloping bank of a creek, the slope being a very gentle one, and placed at an angle of about twenty degrees. We have found the nests built in the upright banks of creeks, but the former situations, on a slope, were chiefly resorted to. Specimen A. measures = 0·84 × 0·75, while specimen F. measures = 0·90 × 0·79.

588	436	3	Three eggs, which were dug out of a sandy slope at Ourimbah Creek, near Cunningham's Gully, Ourimbah, near Gosford, N.S.W. Taken by H. Blakeney and myself, on the 30th of November, 1905. As usual, the eggs were simply deposited on the sand in the round chamber at the end of the tunnel, which in this instance was only 30 inches long. These handsome birds often cover the bottom of the nest with a layer of wing cases (*elytra*) of beetles, before depositing their eggs. Specimen A. measures = 0·81 × 0·72.

Drawer P.

589	45	4	AUSTRALIAN RAVEN, *Corone australis*, Gould.

(This bird is known to the aborigines of the Clarence River district as "War-gen.")

Set of 4 eggs, which were taken from the top of a tall Spotted Eucalypt (*Eucalyptus maculata*), at Ti Tree Creek, near South Grafton, N.S.W., on the 25th of September, 1894. The nest was placed 100 feet from the ground, and was exceedingly difficult to climb to. These birds always selected the very tall trees in the Clarence River district, when building their nests, and the seven sets of eggs taken there by us, were *all* placed very high up, in rather dangerous positions for persons desirous of climbing to them. Taken by Frank and Sid. W. Jackson. Specimen A. measures = 1·88 × 1·18. My experience with this Crow on the coast of New South Wales, is that when building its nest it usually selects the highest tree on the highest hill, and very often the nest can only be reached by a person who is really expert at tree climbing. I have seen a nest placed at a height of 120 feet, and my brother has taken its eggs at this altitude. However, in the central and more western parts of New

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			South Wales, it builds low down, as the timbers in those regions are smaller and rather stunted in their growth, and from an oologist's point of view the nests are placed in more accessible and less break-neck places. I have found the nests of this bird within six miles of Sydney.
590	44	5	CROW, *Corvus coronoides*, V. and H. Set of 5 eggs, taken from a tall Spotted Eucalypt (*Eucalyptus maculata*), near the Lake at the back of Swan Creek, Clarence River, N.S.W., and was placed in a mass of Mistletoe (*Loranthus*) at an altitude of 86 feet. Taken by Frank and Sid. W. Jackson, on the 14th of October, 1894. The eggs are very finely marked all over; two, however, specimens D. and E., are lighter types, have less markings, and appear foreign to the set. Specimen A. measures = 1·57 × 1·11. It is interesting to note that during the next season we took a lovely pair of Brown Hawk's eggs from this identical nest; the date was 4th September, 1895 (see data No. 268). In eight seasons we took nine sets of this Crow's eggs in the Clarence River district.
591	—	4	SHORT-BILLED CROW, *Corvus Bennetti*, North. (This species is only recently described in the new work published by the Sydney Museum.) Set of 4 eggs, which are much more boldly spotted than those of the two former species. Taken from a nest at Timbriebungie, near Dubbo, N.S.W., by H. Reid, on the 19th of September, 1902. This crow has a peculiar laugh-like caw, which is more interrupted and broken than that of the two previously described. Specimen A. measures = 1·54 × 1·12. Specimen B. measures = 1·63 × 1·08.
592	238	4	WHITE-BACKED MAGPIE, *Gymnorhina leuconota*, Gray. Set of 4 eggs, taken near Kewell, Victoria, on 23rd September, 1893, which are of the dark grey variety. Specimen A. measures = 1·63 × 1·03.
593	238	3	Set of 3 eggs, reddish-brown variety. Taken by H. Lidgett near Myrniong, Victoria, on 3rd November, 1896. This is a beautiful clutch. Specimen A. measures = 1·56 × 1·12.
594	237	2	BLACK-BACKED MAGPIE, *Gymnorhina tibicen*, Latham. (This bird is known to the aborigines of the Clarence River district as "Corong-ell.") Set of 2 eggs, which were obtained from a nest with an egg of the Channel Bill Cuckoo, at Caramana, near South Grafton, Clarence River, N.S.W., on the 9th of November, 1893. Taken by Frank and Sid. W. Jackson. The nest was placed in an Ironbark Eucalypt near the Caramana Lagoon, and the three eggs were heavily incubated. When taking this set we were quite unconscious of the fact that the grey-looking specimen was the rare egg of the giant Channel Bill Cuckoo, and it was some time afterwards before I found it out. During the same season (1893) these Cuckoos were very plentiful about Grafton, after the big flood, and no doubt many of their eggs were laid in the district. The huge fig trees (*Ficus macrophylla*) growing in the scrubs on Susan Island, in the river opposite Grafton, were alive that year with these noisy birds. They are known about Grafton as the Fig Hawk, and this appellation they have received, no doubt, on account of their constantly visiting and feeding in these large scrub Fig trees. Specimen A. measures = 1·56 × 1·09.
	401	1	CHANNEL BILL CUCKOO, *Scythrops novæ hollandiæ*, Latham. One egg, taken by Frank and Sid. W. Jackson with the latter two Magpie's eggs, on the 9th of November, 1893. It measures = 1·61 × 1·19, and is a pointed specimen. I had the pleasure of examining another of these rare eggs, which was taken from a nest of the Black-backed Magpie on Belltrees Station, near Scone, N.S.W., during season 1905. These Cuckoos are regular spring visitors in Australia, though in some districts they make their appearance somewhat later, and their very loud "coo r-r-r, coo r-r-r, coo r-r-r," can be heard for miles as they fly high overhead, immediately attracting

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			your attention. They are also familiarly known in some localities as Rain or Flood Birds, for their presence is supposed to be a sure indication of much rain. The birds arrived in great numbers in the Clarence River district during December of 1892, and strange to say a few weeks later the locality was visited by a most disastrous flood, which I witnessed. John Welsh, of South Grafton, informed me several years ago that while he was in the scrubs at Cangi, in the Upper Clarence River district, engaged in the cutting of Cedar, he had many opportunities of watching these Channel Bill Cuckoos, and has often seen the Pied Crow Shrikes (*Strepera graculina*) feeding the young of this Cuckoo in its nest. The eggs of these Channel Bills are not unlike those of the Pied Crow Shrikes.
595	237	4	BLACK-BACKED MAGPIE, *Gymnorhina tibicen*, Latham. (Variety A).—Set of 4 most extraordinary looking eggs, on account of their very elongated form. Taken by Frank and Sid. W. Jackson, near South Grafton, N.S.W., on the 23rd of September, 1894. Specimen A. measures = 1·92 × 1·07.
596	237	3	(Variety B.).—Set of 3 eggs, which are of a very rare form of ground colouring and markings. They are a pale bluish-white, with round spots of deep reddish-brown sparingly scattered over the shell. Taken by Frank and Sid. W. Jackson at South Grafton, on the 7th of October, 1894. Specimen A., which has very few spots on it, measures in inches = 1·57 × 1·07.
597	237	3	(Variety C.)—Set of 3 eggs, of a stone-grey colour, zoned or capped at larger ends with dark markings. Taken by Frank and Sid. W. Jackson at South Grafton, on the 23rd of September, 1894. Specimen A. measures = 1·66 × 1·13.
598	237	3	(Variety D.)—Set of 3, which very much resemble Crows' eggs. Taken at South Grafton by Frank and Sid. W. Jackson, on the 30th of October, 1893. Specimen A. measures = 1·60 × 1·13.
599	237	3	(Variety E.)—Set of 3 eggs, which resemble those of the Pied Crow Shrike. Taken at South Grafton by Frank and Sid. W. Jackson, on the 16th of September, 1892. Specimen A. measures = 1·65 × 1·13.
600	237	4	(Variety F.)—Magnificent set of 4 eggs, which are of a pale apple-green ground, with large blotches (*not streaks*) of reddish-brown. This is the best marked set I have ever seen. Taken by Frank and Sid. W. Jackson at South Grafton, on the 30th of September, 1894. Specimen A. measures = 1·50 × 1·07.
601	237	2	(Variety G.)—Set of 2 eggs, which are a very remarkable and rare variety, and altogether different to the latter set. The ground colour is a reddish-chocolate without markings. Taken near South Grafton, N.S.W., by Frank and Sid. W. Jackson, on the 10th of September, 1893. In the construction of the nest, from which the above two eggs were taken, several long pieces of barbed wire were used. Specimen A. measures = 1·50 × 1·06.
602	237	2	(Variety H.)—Set of 2 eggs, which are of the more usual and typical form, and were taken at Swan Creek, near South Grafton, N.S.W., by Frank and Sid. W. Jackson, on the 16th of September, 1892. Specimen A. measures = 1·57 × 1·17. This concludes the fine series of this Magpie's eggs in the collection, and it is truly wonderful what a number of very distinct forms may be found in the ground colouring, and the general disposition of their markings.
603	239	2	TASMANIAN MAGPIE, *Gymnorhina hyperleuca*, Gould. Set of 2 eggs, taken by C. R. Porter, at Campbelltown, Tasmania, on the 16th of August, 1896. Specimen A. is heavily capped with markings at the pointed end, and measures = 1·47 × 1·07.
604	240	3	LONG-BILLED MAGPIE, *Gymnorhina dorsalis*, Campbell. Set of 3 eggs, taken near Freemantle, Western Australia, on the 3rd of October, 1899. This is a beautiful richly marked clutch, and was taken by a timber getter and sent through the post "unblown," but arrived safely. Specimen A. measures = 1·67 × 1·13.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
605	47	3	HILL CROW SHRIKE, *Strepera arguta*, Gould.

Set of 3 eggs, taken from a tall Eucalypt on Flinder's Range, South Australia, by H. Taylor, on the 8th of September, 1886. Specimen A. measures = 1·66 × 1·18.

606 48 3 GREY CROW SHRIKE, *Strepera cuneicaudata*, Vieillot.

Set of 3 eggs, taken at Kurrajong, N.S.W., by J. Cox, on the 22nd of September, 1888. This set has retained its colour remarkably well, and like most other sets in the collection has faded but very little. Specimen A. measures = 1·77 × 1·25.

607 51 2 SOOTY CROW SHRIKE, *Strepera fuliginosa*, Gould.

Set of 2 eggs, taken on the north coast of Tasmania by H. Ross, on the 31st of October, 1896. Specimen A. measures = 1·72 × 1·12.

608 49 1 LEADEN CROW SHRIKE, *Strepera plumbea*, Gould.

One egg, which is a beautiful specimen, and was taken from a nest built on top of a tall, dead, hollow stump or barrel of a tree, on the Arthur River, South-west Australia, by S. Hall, on the 16th of July, 1895. It measures = 1·69 × 1·12.

609 46 3 PIED CROW SHRIKE, *Strepera graculina*, White.

Set of 3 perfect specimens, which were taken by Frank T. A. Jackson at Corindi Creek, south of the Clarence River, N.S.W., on the 17th of October, 1896. The nest was placed in a Eucalyptus tree, at an altitude of 79 feet. The eggs of this bird are very rare, as the nests are usually placed in awkward positions at the extremities of long branches, rendering them quite *impossible* to get at. It was with only the greatest trouble and patience that this set was procured. See what A. J. Campbell says at the foot of page 58 in his book. This bird is well known as the "Charawack" on the northern rivers of New South Wales. Its note resembles "char-a-wack, char-a-wack, char-a-wow." The large Channel Bill Cuckoo, or Flood Bird, often deposits its eggs in the nests of this bird. Specimen A. measures = 1·07 × 1·12.

610 50 2 BLACK-WINGED CROW SHRIKE, *Strepera melanoptera*, Gould.

Set of 2 eggs, taken in the south-western part of Victoria during August of 1889. Unfortunately this is all the data that I was able to procure about them. Specimen A. measures = 1·73 × 1·19.

611 244 3 WHITE-WINGED BUTCHER BIRD, *Cracticus leucopterus*, Gould.

Beautiful set of 3 eggs, taken near Kalgoorlie, Western Australia, on the 9th of October, 1898. Received from A. J. Campbell. Specimen A. measures = 1·23 × 0·90.

612 243 3 PIED BUTCHER BIRD, *Cracticus picatus*, Gould.

Set of 3 eggs, taken by E. Drew in the Nicholson River district, North-west Queensland, on the 18th of November, 1897. Specimen A. measures = 1·25 × 0·92.

613 242 4 BLACK-THROATED BUTCHER BIRD, *Cracticus nigrigularis*, Gould.

(This bird is known to the aborigines of the Clarence River district as "Budg-e-gulen.")

Set of 4 eggs, of the yellowish-brown variety. Taken by Frank and Sid. W. Jackson, on the 18th of September, 1892, from a nest in a Spotted Eucalypt (*Eucalyptus maculata*), at Bawden Bridge, Orara

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			River, near South Grafton, Clarence River, N.S.W. Specimen A. measures = 1·39 × 0·95. I had the pleasure of again meeting with these birds on Segenhoe Flats and Belltrees Station near Scone, N.S.W., during the end of March of this year (1907). It is glorious to roam through the bush at early morn, as the sun is just peeping his head up over the hill tops, and catch the sweet organ-like notes of this bird as it sits piping away on the very point of the topmost branch of some tall tree. The districts of rich land, known as Apple-tree Flats, and low open undulating hills studded with large trees, are the places to which this species particularly resorts. In the Clarence River district we often met with them, and succeeded in finding a number of their nests and eggs. During the visit in 1839 of the late John Gould, the celebrated naturalist, to Australia, he observed these birds in the open country near Scone, and along the banks of the Upper Hunter River of New South Wales.
614	242	3	Set of 3 eggs, of the light greenish-brown variety. Taken by Frank and Sid. W. Jackson at South Grafton, on the 24th of August, 1898. The nest was built in a Swamp Mahogany (*Eucalyptus robusta*), and placed at an altitude of 50 feet. Specimen A. measures = 1·35 × 0·90. I have often found these eggs with quite a *black* ground colour, in the vicinity of the Pine River, near Brisbane, Queensland.
615	246	4	GREY BUTCHER BIRD, *Cracticus destructor*, Temminck. Set of 4 eggs of the dull greenish-grey ground colour variety, which are well spotted at the larger ends. Taken by Frank and Sid. W. Jackson, at the Wash Pen Gully, near South Grafton, N.S.W., on the 30th of September, 1892. The nest was built in a forest Apple tree (*Angophora*), and was placed only four feet from the ground. It is very unusual to find such nests so low down. I also found these birds breeding at Manly and Roseville, near Sydney. Specimen A. measures = 1·25 × 0·95.
616	246	4	Set of 4, beautiful rich brown specimens, quite unlike the latter set, and the eggs are much smaller. The zone markings are well defined, and specimen D. has a set of them at each end, which is rather uncommon. The clutch was taken by Frank and Sid. W. Jackson, on the 28th of August, 1898, from a Red Eucalypt (*Eucalyptus rostrata*), at the rear of Swan Creek, near the lake, South Grafton, N.S.W. I have known these birds frequently attack Canary cages, kill the birds, and then carry them away. This was only in cases where the cages were small, and hung in exposed places convenient to the Butcher Birds. Specimen A. measures = 1·08 × 0·85.
617	247	3	TASMANIAN BUTCHER BIRD, *Cracticus cinereus*, Gould. Set of 3 eggs of the greenish-grey variety. Taken by W. L. Williamson, at Brown's River, Tasmania, on the 4th of October, 1893. Specimen A. measures = 1·28 × 0·92.
618	247	2	Set of 2 eggs, of a light bluish-grey variety. Taken at Brown's River Road, Tasmania, by M. W. Harrison, on the 15th of September, 1894. Specimen A. measures = 1·23 × 0·91.

Drawer Q.

619	588	6	BALD COOT OR RED BILL, *Porphyrio melanonotus*, Temminck. Beautiful set of six well marked eggs, taken in Alipou Swamp, South Grafton, N.S.W., by Sid. W. Jackson, on the 25th of October, 1893. During our collecting trips on the swamps we used a flat-bottomed cedar canoe, 10 feet long, specially built for the purpose. "The Podiceps," as she was named, rendered us much valuable assistance when examining the large swamps of the Clarence River district in quest of eggs. Specimen A. measures = 2·12 × 1·42.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
620	584	6

NATIVE HEN,

Tribonyx mortieri, Du Bus.

Beautiful set of 6 eggs, taken by M. W. Harrison, on the 15th of November, 1894, on Wilson's Swamp, New Norfolk Road, Tasmania. Specimen A. measures = 2·22 × 1·52.

"The Podiceps," the canoe used while nesting on the Clarence River Swamps of New South Wales.

621 585 2

BLACK-TAILED NATIVE HEN,

Microtribonyx ventralis, Gould.

Pair of eggs, taken by J. T. Gillespie in the Riverina, Victoria, on the 10th of October, 1887. Specimen A. measures = 1·85 × 1·27.

622 587 2

BLUE BALD COOT,

Porphyrio bellus, Gould.

Fine pair of eggs, taken by S. Hall, near Lake Muir, South-west Australia, on the 1st of January, 1896. Specimen A. measures = 2·17 × 1·46.

623 589 4

COOT,

Fulica australis, Gould.

Set of 4 eggs, taken by Frank and Sid. W. Jackson on the 10th of November, 1895. The nest was built in rushes on the edge of a small creek, six miles from South Grafton, N.S.W. Although these birds frequent the swamps and creeks of the Clarence River district in thousands, yet their nests are very rare and hard to find. The above set of eggs is the only one we took during our long residence in the district. I think most of these birds go out west to breed. Specimen A. measures = 1·98 × 1·40.

624 589 7

This is a beautiful set of 7 eggs. Taken by J. Watson at Buckiinguy Station, Western New South Wales, on the 2nd of November, 1903. Specimen A. measures = 2·01 × 1·33.

625 586 11

BLACK MOOR HEN,

Gallinula tenebrosa, Gould.

A very large set of 11 eggs, taken by Sid. W. Jackson, on a swamp near Lavadia, at the Lake, six miles from South Grafton, N.S.W., on the 28th of August, 1898. While I was up at the nests of the Little Black and White Cormorants, in a Swamp Mahogany tree (*Eucalyptus robusta*), I saw this set of eggs in a nest beneath me, among the rushes, and waited for the bird's return before I robbed it. This set of eggs had incubation about seven days old, but were nevertheless easily emptied. Two of the eggs (specimens J. and K.) are quite differently marked to the others, and probably two birds of the same species laid in the one nest. Specimen A. measures = 1·93 × 1·42. The Litttle Black and White Cormorants' nests in the Mahogany tree were hardly finished being built, and on September 11th of the same year (1898), we had an extensive taking of their eggs, in addition to those of the Little Black Cormorant and the Snake-necked Darter. (See data Nos. 307, 308, 310).

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
626	586	7	Set of 7 eggs, and the best marked set of this species we have ever taken. The uniformity of the ground colouring throughout the clutch, together with being covered with the large purplish-brown blotches, make it a beautiful set. Taken on the 25th of September, 1898, on a swamp near Lavadia, South Grafton, New South Wales, by Frank and Sid. W. Jackson. Specimen A. measures = 1·95 × 1·33.
627	583	1	RUFOUS-TAILED MOOR HEN, *Amaurornis moluccana*, Wallace. One egg, of a kind rarely obtained, and only a few specimens of which have so far been found. Taken by C. Woodlands, near Burketown, Gulf of Carpentaria, North-west Queensland, on the 4th of February, 1897. The ground colour is a dull white, covered sparingly with markings of reddish-chestnut and bluish-grey. It measures = 1·82 × 1·27.
628	718	1	BITTERN, *Botaurus poeciloptilus*, Wagler. One egg, which was taken from a nest in a swamp near Ulmarra, Clarence River, N.S.W., on the 18th of September, 1892, by Sid. W. Jackson. The egg was heavily incubated, and in the nest were also three freshly hatched young. This specimen was successfully blown after a lot of trouble, and is perfect. The eggs of this species are of an olive-brown colour, and have no markings. This one measures = 1·91 × 1·47. I have never been able to obtain a perfect *set* of 4 of them, not even through the medium of exchanges.
629	718	2	Two eggs, taken on the Murray River Swamps, Victoria, on the 4th of September, 1890, by G. W. Carter. Specimen A. measures = 2·07 × 1·51.
630	714	3	LITTLE MANGROVE BITTERN, *Butorides stagnatilis*, Gould. Beautiful clutch of 3 eggs. Taken by Frank and Sid. W. Jackson at Caramana, near South Grafton, Clarence River, on the 9th of November, 1893. The nest, which was a very loose structure of thin

This is a sample of one of the Large-leaved Fig Trees (*Ficus macrophylla*) of the scrubs of the Clarence and Richmond River districts of New South Wales, which have frequently been quoted in the preceding pages. This giant measures over twenty feet across at the roots.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			sticks, was placed on a horizontally forked branch of a scrub tree, leaning over a small creek, and only six feet above the water. We were successful in finding several sets of these rare eggs, but this was our first take. During November of the previous season (1892), I found a nest of this species containing two young birds, a fact which gave me much valuable assistance with regard to the locality they frequented during breeding season; also the style of their nests, and the position in which they are placed. The birds feed on the muddy slopes of the river bank at low tide, and I have often seen them perched in the River Oaks on the bank, waiting for the tide to recede. These eggs are of a beautiful bluish-green, and have no markings. Specimen A. measures = 1·72 × 1·20.
			YELLOW-NECKED MANGROVE BITTERN,
631	717	4	*Dupetor gouldi*, Bonaparte.
			(This bird is known to the aborigines of the Clarence River district as "U-den-u-dijee.")
			This splendid set of 4 rare eggs was taken opposite Riverview, near Grafton, Clarence River, on the 17th of December, 1893, by Frank and Sid. W. Jackson. The nest was a very flat structure, composed of thin dried stems and twigs of the Weeping Willow (*Salix Babylonica*), and placed on a horizontal branch of that tree, which was leaning over the water 12 feet up. This bird is very like the latter, in fact it would appear as one and the same species to the casual observer. Its general habits and environments are precisely the same, notwithstanding that the eggs are *pure white*, and not of a bluish-green, as is the case with the previous species. In all we found five nests, with clutches of eggs, and they varied from two to four in number for a sitting, being rounder and more swollen specimens than those of the preceding species. The shell is minutely pitted all over. The dimensions of the four eggs of the set under notice are as follows:—Specimen A. = 1·67 × 1·31. Specimen B. = 1·66 × 1·32. Specimen C. = 1·66 × 1·34. Specimen D. = 1·63 × 1·30. The eggs of our smallest Australian species of this family, viz., the Minute Bittern (*Ardetta pusilla*), I have never seen. I have learned of them, and strange to say they are also pure white, but only measure a little over an inch in length. While exploring the reed beds of Dee Why Lagoon, north of Manly, near Sydney, during October of 1905, in company with A. F. Basset Hull, I found a nest of this species. In a trench where the rushes were tall and growing luxuriantly, we heard a fluttering sound, and on going over discovered that our dog had captured one of these birds (♀) at its nest, the latter being quite new, and just ready for eggs. Unfortunately the bird was much damaged, thus rendering it necessary for us to kill her. On dissection we found that she was just ready to start laying; so our loss was great, losing an opportunity that may never occur again in this direction, by giving us a chance to take the very rare egg of the species. The bird was preserved, and has since found a resting place in the "Hull Collection." The nest measured about eight inches across, and was a flat open structure, composed of rushes and grass loosely put together and bent into a platform shape, being fastened to the reeds about fifteen inches above the water.
			LARGE EGRET OR WHITE CRANE,
632	756	4	*Herodias timoriensis*, Lesson.
			This is a perfect set of 4 eggs, which was taken by H. V. Foster on Stony Island, Tuckian Swamp, Richmond River, N.S.W., on the 6th of November, 1899. The birds were nesting in a colony, and the nests contained from incomplete sets of eggs to some almost hatched. They were made of sticks, and were placed in trees which stood in the swamp. I only found these birds breeding on one occasion in the Clarence River district, and the nests all contained young birds. It was a very great disappointment to me in not getting one single egg from the thirteen nests. Specimen A. of the above set measures in inches = 2·22 × 1·58.
			LITTLE SPOTLESS EGRET,
633	711	3	*Garzetta nigripes*, Temminck.
			Set of 3 rare eggs, taken by E. Drew on the 25th of April, 1898, near the Nicholson River, North-west Queensland. The nest was built of sticks and lined with green Eucalyptus leaves, and was placed, with several others, on a Eucalyptus tree leaning out over the edge of a swamp. This

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

set is described in A. J. Campbell's book on page 958. The correct measurements are :—Specimen A. = 1·93 × 1·36. Specimen B. = 1·82 × 1·32. Specimen C. = 1·85 × 1·27.

634 711 3 Set of 3 eggs, found by L. Dumas, at North-west Australia, on the 29th of August, 1901. The nest was a loose structure of sticks, placed in a tree growing in a lagoon. Specimen A. measures 1·74 × 1.27. In 1861 one of these beautiful birds was shot near Brisbane, Q., and that was the first record of it inhabiting Australia. It is found also in India and Europe. It is truly a scandalous shame the brutal way in which these beautiful birds are still allowed to be butchered for the sake of their white plumes; a fact which holds good in Australia as well as in foreign countries. During breeding season the birds usually associate in colonies, and when they are sitting on their nests in the trees, the cruel and heartless hunter comes along, starts his tragical and ruthless destruction, shooting them one by one from their nests, and thus leaving the young ones therein to slowly pine away and die of starvation. Only quite recently about fifty Egrets in a colony, were noticed building their nests in trees in a suitable part of the Manning River district of New South Wales; some days later, however, sad to relate, it was found that a bird killer had visited the spot, as all the old ones were dead and lay about in various stages of putrefaction, while their young were either dead or dying for want of sustenance. The Egrets had been shot for the sake of a few feathers, with which to adorn feminine headgear, and these plumes are frequently to be seen displayed in such manner, not only in Australia, but also in other parts of the world. I am quite sure that many persons who admire and use these feathers for dress decoration, are quite unconscious of the brutal and callous way in which they are originally collected.

NEST AND EGGS OF THE BLACK-SHOULDERED KITE,
(*See data No. 247, page 40*).
(About one-third of the natural size).
Loc., Caramana, South Grafton, Clarence River, N.S.W.

635 708 4

WHITE-NECKED HERON,
Notophoyx pacifica, Latham.

Beautiful set of 4 eggs, taken by Frank and Sid. W. Jackson, at Caramana, South Grafton, N.S.W., on the 7th of September, 1898. The nest was a large structure of sticks, placed at an altitude of 100

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			feet, in a huge Red Eucalypt (*Eucalyptus rostrata*). The tree was climbed by my brother, who in this case got up to the nest by chopping niches or steps with a tomahawk, holding on by a strong green vine that had been placed around the barrel of the tree, which was nearly six feet thick. The climb was a very difficult and dangerous one. We found upwards of a dozen of these nests in the Clarence River district, and they were all built in very large trees. Specimen A. measures = 2·13 × 1·52. See A. J. Campbell's book, page 957, *re* this set.
636	707	5	WHITE-FRONTED HERON, *Notophoyx novæ hollandiæ*, Latham. (This bird is known to the aborigines of the Clarence River district as " Je-nam-or-run.") Set of 5 eggs, one being a round mal-formed specimen, and only a little larger than an ordinary sized glass marble. Taken by Frank and Sid. W. Jackson, near South Grafton, N.S.W., on 10th August, 1898. The nest was placed in an Ironbark Eucalypt, at an altitude of 57 feet. These birds are very plentiful in the Grafton district. This set is of a richer blue than is usually found. Specimen A. of the set measures = 1·87 × 1·37. Specimen E. (small mal-formed egg) measures = 1·14 × 0·97.
637	707	3	Set of 3 eggs, taken by W. McEnerny and Frank T. A. Jackson at Ti Tree Creek, South Grafton, N.S.W., on the 28th of August, 1898. The nest was built in the same tree as that of the Whistling Eagle, and that of the latter contained two young birds, while both were placed in a Red Eucalypt (*Eucalyptus rostrata*). Specimen A. measures = 1·78 × 1·35.
638	707	5	Large set of 5 eggs, which are splendid specimens and were taken on the 25th of September, 1898, by W. McEnerny, Frank, and Sid. W. Jackson, at the Lake, near South Grafton, N.S.W. The nest was placed at the end of a long limb, in a Red Eucalypt, at an altitude of over 60 feet, and was rather difficult to reach. The *first* set of these eggs I took was in September, 1891, and when informed as to where the nest was located, my brother and I walked 20 miles (there and back) to rob it. Specimen A. measures = 2·04 × 1·30.
639	713	3	NIGHT OR NANKEEN HERON, *Nycticorax caledonicus*, Gmelin. Set of 3 eggs, which, to the cold scientific eye, appear very different to those of the latter species, being of a pale bluish or sea green. This clutch was the first that passed into my hands, and was forwarded to me by my friend C. Woodlands, who collected it in the Nicholson River district, near the Gulf of Carpentaria, where he has taken so many rare eggs. It was found on the 10th of January, 1898. Specimen A. measures = 1·99 × 1·47. My brother and I once found a colony of these birds busily engaged building their nests in a patch of Swamp Oak trees (*Casuarina glauca*) on the edge of a creek at Lavadia, near South Grafton, N.S.W., during the early part of November, 1894. Subsequently some thoughtless person shot a few of the birds, and to our great disappointment the whole lot of them at once quitted the spot, and we saw no more of them again.
640	712	2	REEF HERON, *Demiegretta sacra*, Gmelin. Set of 2 eggs, taken by E. D. Atkinson, on a small island on the north-west part of Tasmania, on the 7th of November, 1892. The nest was placed on a rock on the sea beach. Specimen A. measures = 1·78 × 1·31.
641	704	1	GREY HERON, *Ardea cinerea*, Linnæus. One egg, taken in Europe during the season of 1893. Unfortunately no fuller data accompanied the egg, which was received from J. W. Mellor, of Fulham, near Adelaide, South Australia. This bird does not breed in Australia. The egg measures = 2·27 × 1·63.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

Drawer R.

642 592 2

STONE PLOVER OR BUSH CURLEW,
Burhinus (*Œdicnemus*) *grallarius*, Latham.

(This bird is known to the aborigines of the Clarence River district as "Whare-bung-arie.")

Splendid set of 2 well marked eggs, which were taken by Frank and Sid. W. Jackson, at Clarenza, South Grafton, N.S.W., on the 21st of October, 1894. These eggs are characterised by their remarkably protective coloring. They were placed upon the bare ground among dead trees, on a gentle slope at the foot of a hill. They are very swollen types. Specimen A. is beautifully blotched, and measures = 2·25 × 1·68.

643 592 2

Magnificent pair of eggs, taken by Sid. W. Jackson, at the South Pine River, North-east of Brisbane, Q., during October of 1885. This clutch are most extraordinary specimens, owing to their very long and torpedo-like shape, and are the most pointed types I have collected. Both are beautifully blotched, and specimen A. measures = 2·64 × 1·48.

644 601 4

SPUR-WINGED PLOVER,
Lobivanellus lobatus, Latham.

Set of 4 eggs, of the dark variety, which were taken from the edge of Duck Swamp, South Grafton, N.S.W., by W. McEnerny and Frank T. A. Jackson, on the 16th of October, 1892. Specimen A. measures = 1·97 × 1·44.

645 601 4

Set of 4 eggs, which are dark specimens, and were taken at Caramana, near South Grafton, Clarence River, N.S.W., by Sid. W. Jackson, on the 14th of July, 1895. I once found a set of these eggs on the side of a very steep hill, really a most unusual place for this bird to lay. The eggs were placed in a small hollow, about five inches across by one deep, which evidently had been made by cattle while climbing up when the ground was wet. Specimens A. and B. are much darker than the other two. Specimen A. measures = 2·02 × 1·42.

645A 601 4

Set of 4 handsome eggs, which are of a lighter and smaller variety than those of the two previous sets, which are from the Clarence River district. They were taken by myself 42½ miles north-east of Scone, N.S.W., on a stony ridge at the junction of the Upper Hunter River and Page's Creek, near the homestead on Ellerston Station, on the 16th of August, 1907. I saw the Plover fly from the ridge, and on going over and carefully examining the place, found the four eggs nestled in a slight hollow which the birds had scratched out amongst several large loose stones. The eggs were in rather an advanced state of incubation, but nevertheless I succeeded in neatly blowing them. Specimen A. measures in inches = 1·90 × 1·40.

646 603 4

BLACK-BREASTED PLOVER,
Zonifer tricolor, Vieillot.

Set of 4 eggs, which were taken from the edge of a swamp near South Grafton, Clarence River, by Frank and Sid. W. Jackson, on the 26th of August, 1893. This species does not often visit the Clarence River district, and we only found this set of its eggs there. Specimen A. measures = 1·73 × 1·20.

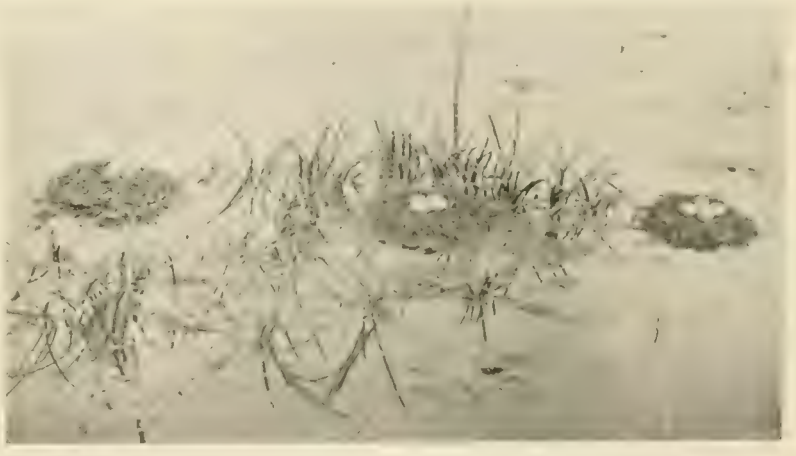
646A 603 4

Set of 4 eggs, which were in an advanced state of incubation, but were successfully emptied. I found them on clear flat ground at the back of the woolshed, not far from the thicket of Yarren trees (*Acacia homalophylla*), on Belltrees Station, near Scone, N.S.W., on the 17th of August, 1907. Their colouring so greatly resembles the ground where they were deposited, that it was extremely difficult to detect them, and I walked past within a few feet several times before making the find. When I first saw the bird I went down over the small gravelly slope, and there remained out of sight for ten minutes,

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			when I ran *suddenly* to the elevated flat, and saw the bird running away from the spot at which I had first disturbed her. On going over I made a most exhaustive survey of the whole place, but even then I could see no eggs, so I again retreated, and ran up after another ten minutes, and saw the bird running away from apparently the same place; but on going over I could see no sign of a nest or eggs. I was determined to find them, so I placed a stick in the ground at this spot with a piece of white paper attached to the top of it, and then walked up to the end of the paddock, a distance of about 200 yards, where I stood behind a large gate post, from which I watched the bird's movements. She slowly and cautiously came back, but in rather a suspicious and round-about way, all the time crying "kar-kar-kar-kar," as she proceeded; ultimately, however, she sat down quite near the stick, and there remained for 20 minutes. I was now satisfied, and of course felt sure a nest must be there, so I left my covert, and walked down and found the four eggs, placed in a very slight depression in the ground, only three feet from where I had put in the stick. Specimen A. measures in inches = 1·77 × 1·23.
647	602	4	MASKED PLOVER, *Lobivanellus miles*, Boddaert. Set of 4 eggs, which are very heavily blotched all over, and are the only clutch of four of these rare specimens, as far as I have been able to ascertain, that have yet been taken. They were found near the junction of the Nicholson and Albert Rivers, in the Gulf of Carpentaria, district of North Queensland, by E. Drew, on the 16th of January, 1898. Specimens A. and B. are more heavily marked than C. and D. The eggs are the same size as those of the Black-breasted Plover, and specimen A. measures = 1·72 × 1·27; but in the ground colour and general markings they are rather different to the eggs of the two preceding species.
648	617	4	RED-NECKED AVOCET, *Recurvirostra novæ hollandiæ*, Vieillot. Set of 4 rare eggs, taken at Shamrock, near Cunnamulla, Queensland, by S. Robinson, on the 7th of February, 1898. Specimen A. measures = 1·96 × 1·37. I saw these birds on the swamps in the Clarence River district of N.S.W. on three occasions, but never knew them to breed there. The late James F. Wilcox, the well known naturalist of the Clarence River, once had some of these beautiful birds alive in his grounds at "Dallinga," South Grafton, and the gardener one day took it into his head to do a little operating; and with a sharp scissors cut off their long thin "curved up" bills. When questioned by his master as to his reason for perpetrating such an act, he calmly remarked "that he had done it in order that the bills might grow straight."
649	617	2	Pair of eggs, which are of a darker stone ground than the above set, and were taken in the interior of New South Wales on the 27th of January, 1889. Specimen A. measures = 1·98 × 1·41. The Avocet has very long thin red legs, like stilts, and it's bill is so very much upturned that it resembles exactly a bootmaker's awl. The eggs are very similar to those of the Banded and White-headed Stilt, only they are larger.
			WHITE-HEADED STILT, *Himantopus leucocephalus*, Gould.
650	615	4	(Variety A).—Set of 4 handsome specimens, taken on Duck Swamp, South Grafton, Clarence River, New South Wales, on the 2nd of September, 1898, by L. Vesper, Jno. McEnerny, Frank and Sid. W. Jackson. See A. J. Campbell's book on "Nests and Eggs of Australian Birds," page 802, for my notes and photographs on the above find. Three nests are shown in the accompanying photograph (page 149), and the above set was taken from one which is to be seen in the middle. This set of eggs is decidedly like those of the Red-necked Avocet, only of course they are smaller. The ground colour is of a beautiful yellowish stone, with a faint olive tinge, and the eggs are beautifully blotched all over with dark and almost black markings. It is the best set of all those we found. The first eggs of this bird found in New South Wales were taken by an aboriginal in the employ of the late J. MacGillivray, during September of 1866, and strange to say from the same swamp as the series of specimens now

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

under notice. I was quite surprised to find these beautiful birds breeding so near the township, it being the first time I had noticed them in the district. They came in great numbers, and their dog-like barking notes could be heard both day and night. The swamps were well filled with water, heavy rain having fallen just prior to the birds' arrival. They were all confined to the eastern end, resorting to the shallower areas for nest-building purposes, and we counted upwards of seventy nests in a space of about one hundred yards square, succeeding in taking clutches of the rare specimens from over thirty of them. The eggs varied very considerably in size, shape, ground colouring, and disposition of the markings. Some were quite fresh, while others had incubation about six days old; those in many of the nests were broken, owing to cattle walking on them while feeding in the swamp. Nine days later (11th September), I found another colony of Stilts breeding on Sportsman Swamp, near South Grafton. On this occasion the nests numbered only twenty-five, all of which contained young, excepting five with sets of eggs very heavily incubated. On Duck Swamp, in places where the water was over fourteen inches deep, the nests appeared to be floating structures, but where the depth was only nine or ten inches, they were firmly built up from the bottom. They were very neatly constructed, and measured from six to nine inches across, being composed of aquatic weeds, small twigs, grass, etc., having the appearance in the water of those of the Black-throated Grebe, only they are much more smartly built. The eggs, which were four in number in nearly every instance, were placed in the nests with the thin or pointed ends turned inwards; but some structures, which were not built up sufficiently above the surface of the water, were very wet inside, and in such cases the thick ends were sometimes turned innermost. It is rather unusual for birds to place their eggs in the latter position, and probably it was done on account of the water soaking into the centre of the nest; the thicker ends of the eggs being in the water, would, of course, naturally retain more warmth, and be thus better able to withstand the action of the water, than when placed with the pointed ends inwards. The majority of the nests were situated from ten to fifteen feet apart, while here and there we would drop across a few close together. In the accompanying photograph showing these structures, the one on the right and left sides has been moved up close to the central one (Data No. 650), in order to make a group picture. The ordinary notes of these birds form a peculiar puppy dog-like bark, and, on being robbed of their eggs, they kept jumping straight up off the ground, and also out of the water, to a height of about two feet, all the time making a croaking noise, and flapping their wings. It was a beautiful sight to see these lovely creatures, with their white plumage and very long pink legs reflected in the clear water, hopping about; also, off and on standing upon their nests. Unfortunately I was unable to get a snap-shot photograph of them in these positions, as the camera which I was using at the time was fitted only for time exposure. Specimen A. measures = 1·82 × 1·23.



NEST AND EGGS OF THE WHITE-HEADED STILT.
(*Set data No. 650* came from the nest in the middle.)
(About one-sixteenth of the natural size.)
Loc., Duck Swamp, South Grafton, Clarence River, N.S.W.

651	915	4

(Variety B.).—Set of 4 eggs, short and rather rounded specimens, which are quite different to the latter clutch. The ground colour is of a deep yellowish stone, or dark sienna, covered with dark and

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			almost black markings. One egg of this set (specimen D.), is *very* small and rather pointed at one end, and with the large blotches upon it, resembles that of the Painted Snipe. Taken by Frank and Sid. W. Jackson, on Duck Swamp, South Grafton, N.S.W., on 2nd September, 1898. In the accompanying photograph (page 149) this set will be seen in the nest on the right. The set measures in inches as follows :—Specimen A. = 1·60 × 1·17. Specimen B. = 1·62 × 1·20. Specimen C. = 1·57 × 1·22. Specimen D. = 1·49 × 1·10.
652	615	3	(Variety C.)—Set of 3 eggs, of which the ground colour and markings are quite different to the two former varieties. Two of the eggs are very pointed at one end, while the other is rather swollen and blunt at the smaller end. The ground colour is of a *dull* greenish-stone, with markings of cloudy and small broken blotches of greyish-black, which are scattered all over the surface, making it a very remarkable set. Taken by Frank and Sid. W. Jackson, on Duck Swamp, South Grafton, Clarence River, on 2nd September, 1898. Specimen A. measures = 1·74 × 1·21.

Collecting the eggs of the White-headed Stilt, on Duck Swamp, South Grafton, Clarence River, N.S.W. The nest containing *Set data No. 650*, will be seen at the front of the photograph, on the right.

653 616 4

BANDED STILT,

Cladorhynchus leucocephalus, Vieillot.

Beautiful set of 4 eggs, the ground colour of which is olive-stone, covered with irregular markings and long line-like streaks of heavy sepia and umber. Specimen A. is a beautiful egg, and is covered more than the others with the long and twisted hieroglyphic-like markings. In shape and size the four eggs are very uniform, and specimen A. measures = 1.73 × 1·19. They were taken by G. W. Carter, on the Murray River Swamps of Victoria, on the 21st of December, 1892. This is the only set of these eggs I have ever seen.

A morning's work among the eggs of the White-headed Stilt.
(About one-fifteenth of the natural size.)
Loc., Duck Swamp, Clarence River, New South Wales.

654 618 4

SEA CURLEW,

Numenius cyanopus, Vieillot.

(Australian set.)

This is a magnificent set of 4 eggs, and they are the first of their kind taken in Australia. They were found near the sea shore on the northern coast of Western Australia, by L. Dumas, on 23rd November, 1899. The rare eggs of this species are not described in A. J. Campbell's great work, published in 1900, on the "Nests and Eggs of Australian Birds." On page 805 he says :—"The eggs, however, are unknown, but by analogy we can understand that, like other Curlews, the Australian lays four large eggs of a mottled olive-green appearance." He

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

was correct, for both this and the following set answer his latter description. Unfortunately his book was in the press before these and the Norwegian eggs came to hand, and, of course, they arrived too late for their descriptions to appear in it. The four eggs measure as follows, in inches :—Specimen A. = 2·62 × 1·93. Specimen B. = 2·69 × 1·93. Specimen C. = 2·75 × 1 93. Specimen D. = 2·67 × 1·95. The eggs are very pyriform, or pear-shaped, and specimens A. and B. are more so than C. and D., resembling a schoolboy's peg-top in form, one end being very pointed, and the other broad and rounded, though somewhat flat. It is evident they are of this shape in order to keep them from rolling away, in the event of being touched or blown by a strong wind. One end of the egg being so very much thicker than the other, causes it to rotate in a complete circle when it does move, and it cannot possibly roll away any great distance from its nest or original position. They are very protectively coloured, as is the case with all those of this family, and it takes a very experienced eye to find the nests of some of them. In instances such as the Black-breasted Plover, etc., where the female is rather conspicuous in colouring, she walks away and leaves her eggs at the slightest approach of danger, being warned by the male bird, who is always on the watch. They know well, however, that the eggs closely harmonize with the surroundings, thus making them difficult to detect, and they are far safer without the bird. Ground-building birds such as Quail, etc., which have secretively coloured plumage, are very close sitters, and will remain on the nest until they are almost trodden on, being often cut to pieces by mowing machines, so reluctant are they to move. The young of this class are likewise protectively coloured, and are admirably adapted for hiding, whether their habitat is on a grass or gravel-covered flat, on a hill top, or on the sea shore. My experience with all the plover tribe, is that the bird leaves its nest long before it is seen, and they usually run some distance before rising into the air, thus leaving little clue behind as to the location of the nest. This bird under notice is the Curlew proper, the Bush Curlew being really the Stone Plover. I found it very common on the islands in, and shores around, Moreton Bay, Queensland, where at low tide it frequents the mud flats at the entrances to the Pine River, Mosquito and Cabbage Tree Creeks ; also, the extensive stretches of sand opposite Sandgate, where, with its long curved bill, it hooks crabs, various marine worms, etc., from their hiding places. I have noticed the birds in many other localities, while, even at Botany Bay and Port Hacking, near Sydney, they may often be seen feeding on the seashore at low tide, during the warmer months. Their note is a weird cry resembling "cur-lee u, cur-lee-u, cur-lee-u," and is not unlike that uttered by the Stone Plover or Bush Curlew of the forests.

655 618 4

SEA CURLEW,

Numenius cyanopus, Vieillot.

(Norwegian set.)

Splendid set of 4 eggs, found on an open moorland in Northern Norway, on the 26th of April, 1900. The incubation was only about fifty hours old when the set was taken. The bird was shot, so its identity is sure. This set of Sea Curlew's eggs is identical with the latter clutch (No. 654), with the exception that the ground colouring in these Norwegian specimens is rather a darker olive-green. It is interesting to have this set from Norway, in order to compare it with the Australian types. This clutch gives the following dimensions in inches :—Specimen A. = 2·56 × 1·86. Specimen B. = 2·56 × 1·86. Specimen C. = 2·56 × 1·84. Specimen D. = 2·50 × 1·86. It will be seen from the latter measurements that these eggs are a little smaller than those of the Australian bird.

656 737 3

TIPPET GREBE,

Podicipes cristatus, Linnæus.

Set of 3 eggs, taken by F. Ricketson at Baratta, Riverina, N.S.W., on 17th November, 1898. Specimen A. measures = 1·87 × 1·40. The eggs of this set are very dirty and nest stained, and look as if they had been rolled about in a duck-yard for a week, yet it is only quite correct to leave them in their natural state, just as they were found. They are a dull white when first laid, but soon become soiled and nest stained. Like the Black-throated Grebe these birds cover their eggs with weeds each time they leave the nest, and this in a great measure helps to stain and darken them, for being lime-

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			coated the capillary attraction is greater, and the colouring matter is more readily absorbed, than would be the case otherwise. Had nature allowed these eggs to be coloured specimens, the bird would not require to hide them each time she left the nest, and could therefore leave them uncovered, as all other swamp birds do, though they usually deposit coloured specimens. The eggs are always resting on a very wet nest, and most of the time, when the bird is absent, are covered with wet weeds; but they very soon become brown and stained. Always being in such a wet state, a person would naturally conclude that they would soon get cold and decomposed; but nature has provided for this, for the eggs are thickly coated with lime when laid, and the moisture of the wet nest on the lime promotes sufficient heat to keep the eggs warm.
657	736	5	HOARY-HEADED GREBE, *Podicipes poliocephalus*, J. and S. Set of 5 eggs, taken on a swamp near Benjeroop, Victoria, on 21st January, 1896, by G. W. Carter, but like those of the former species are nest stained, and of a brown colour. Specimen A. measures = 1·54 × 1·06. The Murray River swamps of Victoria seem to be the stronghold of this species.
657A	736	1	This egg shows the peculiar rough and limy nodules which often cover the surface of this Grebe's eggs. It was taken in the Riverina district of New South Wales by F. Ricketson, during November, 1900, and measures = 1·50 × 1·01.
658	735	6	BLACK-THROATED GREBE, *Podicipes novæ hollandiæ*, Stephens. (Known better as the "Diver" or "Babchick.") Set of 6 eggs, which resemble those of the latter species, only they are smaller. Two of them are stained a deep brown, and the other four are of a dull white, being unusually clean, and were evidently the last laid. All were fresh, or nearly so. Taken on Caramana Swamp, near South Grafton, Clarence River, N.S.W., by Frank and Sid. W. Jackson, on the 9th of November, 1898. While in our swamp canoe, "The Podiceps," exploring the lagoons of the Clarence River district, we have often found these eggs in their peculiar floating nests, which are very wet and shabby structures, in fact they were always wet, and even during heavy rain, when no birds were about, I have taken the eggs from the nest *quite warm*. No doubt the thickly lime-coated surface promotes sufficient heat in helping nature to keep the eggs warm, and more especially when the wet breast of the hen bird comes in contact with them. Specimen A. measures = 1·33 × 1·01.

Drawer S.

659	557	2	MALLEE FOWL, *Lipoa ocellata*, Gould. Two eggs, taken from a mound or nest by T. A. Brittlebank, on the Pine Plains, Northern Mallee, Victoria, on the 9th of October, 1899. The eggs were fresh. Specimen B. is of a beautiful pinkish-buff. Like the Scrub Turkey, these birds deposit their eggs in a mound of leaves and sand, and cover them over, where they hatch from the natural heat. Specimen A. measures = 3·87 × 2·33. Specimen B. measures = 3·53 × 2·40.
660	50[illegible]	2	QUEENSLAND SCRUB FOWL, *Megapodius duperreyi*, Lesson. Pair of eggs, taken from a large mound by D. Le Souëf, in North Queensland, on the 12th of November, 1893. The temperature of the great mound in which this species deposits its eggs for hatching is 95°, being at a depth of from one and a half to three feet, where the eggs rest. Specimen A. measures = 3·50 × 2·15. Specimen B. measures = 3·28 × 2·17.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.
661	559	2

BARNARD BRUSH TURKEY,

Catheturus purpureicollis, Le Souëf.

Pair of eggs, which were taken by a native at Cape York, Queensland, during November of 1901. Specimen A. measures = 3·63 × 2·39. Specimen B. measures = 3·63 × 2·33.

662	558	5

BRUSH TURKEY,

Catheturus lathami, J. E. Gray.

(This bird is known to the aborigines of the Clarence River district as "Mur-e-din.")

Set of 5 eggs, which were heavily incubated, but nevertheless successfully blown. They were taken at Booyong scrubs, Richmond River, North-east New South Wales, by W. McEnerny, I. J. Foster and Sid. W. Jackson, on the 13th of November, 1899. See accompanying photograph of the nest.

THE HUGE NEST OR MOUND OF THE SCRUB TURKEY,
(From which *Set data No. 662* was taken.)
Loc., Booyong Scrubs, Richmond River, New South Wales.

Specimen A. measures = 3·75 × 2·42. Specimen B. measures = 3·72 × 2·47. The nest was a very large one, and we did a great deal of groping and digging before we succeeded in obtaining all the eggs from the mound. It was placed on the bank of Unio Creek, at Booyong, and the birds had scratched all the leaves, sticks, scrub fruit, dead snail shells, etc., up over a long log, two feet thick, in order to

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	

get the material to the desired spot, where the mound was ultimately constructed, the eggs being laid therein. In digging out these Turkeys' nests in the Richmond River scrubs, I frequently found great numbers of large black scrub plums (*Sideroxylon australe*), and no doubt they had been raked in with the other debris, in order to set up fermentation, thus generating heat. My record take from one nest was *thirty* of these very large white eggs, but, of course, in cases of this kind four or five pairs of birds owned the nest, and the material used in its construction would more than fill four large drays. The eggs, which are edible, are indeed very palatable, and when camped in the scrubs collecting, I always made it a rule in blowing them, to save the contents of those which were fresh, and have often enjoyed a breakfast of omelets which were made from them. The average weight of a full egg is 6¾ ozs., yet I have had them to turn the scale at 7½ ozs. The eggs are comparatively very large for this bird to lay, and in shape are elliptical, though sometimes pointed at one end. They are white in colour, the texture of the shell being rather coarse and granulated, and without gloss. When laid, they are deposited in the nest or mound in terraced circles, with the small ends downwards, being placed from 7 to 14 inches apart. Digging these eggs out from the mound is slow and tedious work, as it is necessary to do it with the hands in order to avoid the risk of breaking them. The heat from the nest is very great, as I have often experienced, and soon puts the diligent worker in a mass of perspiration, as he sits and gropes away in the middle of the hot and sweltering mass of fermented debris. On two occasions, when groping among the rubbish for the eggs in the Richmond River scrubs, I came across Black Snakes (*Pseudechis porphyriacus*). The mounds are sometimes only eight feet across at the base, with a height of 2 feet 6 inches; but in several cases I have known them to measure as much as 14 to 15 feet through at the ground, and have a height of from 36 to 42 inches. In some nests I noticed the tops very conical, while in others they were rather flat, and an old one is readily recognised, as it is generally overgrown with nettles, etc.; the indication of a new one, however, is always demonstrated by the admirable manner in which the ground around has been raked quite clean, extending over a radius of from 40 to 70 feet, while the leaves and other debris are centrally heaped up to form the natural incubator. The greatest number of these nests that I have seen anywhere, and likewise the birds, was during the year 1888 at Patch's scrub, situated 25 miles from Jondaryan, on the Darling Downs, Queensland. The temperature of the mound from which I took this set under notice was (thirty-one inches from the top, down where the circle of eggs was buried) approximately 96° Fah. I placed the thermometer down three times in order to be correct, though I have known the temperature to vary from 93° to 96° Fah. The bulk of the debris which forms the nest is usually scraped up by the birds soon after rain has fallen, for it is then damp. This is done some weeks in advance of the laying, in order to allow sufficient time for fermentation, thereby having the requisite heat established by the time the bird is ready to lay. If, however, the season is a dry one, causing the masses of leaves and other rubbish on the ground to be devoid of moisture, the birds will, when an opportunity occurs, scrape the nest-building materials through some small shallow creek in the scrub, in order to wet it, and then heap it up on the ground about 20 or 30 feet away. In about three or four weeks' time the mound is ready to receive its complement of eggs. The young are well feathered on leaving the eggs, and make their way out of the huge mound unassisted, being able at this early stage to fly and run about, acting independently and feeding themselves. The birds generally selected a damp part of the scrub for their nest, in a locality where leaves were profusely strewn, being careful to secure a small opening where the mid-day sun could penetrate. I captured one of them (♀) in a snare at the nest at Booyong, brought it to Sydney, and presented it alive to the Botanic Gardens. The Director was very pleased to receive it, for it was a very welcome acquisition.

663	591	2	BUSTARD OR WILD TURKEY,

Eupodotis australis, J. E. Gray.

Beautiful clutch of 2 eggs, of the dark olive variety. They were taken in the Nicholson River district, Gulf of Carpentaria, North-west Queensland, by C. Woodlands, on the 24th of November, 1898. The eggs were laid on the bare ground on the plains. Specimen A. measures = 2·98 × 2·13.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			Specimen B. measures = 3·04 × 2·13. Only once have I taken the eggs of this fine bird, and that was near Toowoomba, Queensland, during 1889. I saw several of the birds on the Darling Downs, Queensland, in September of 1906, among the sheep runs, and as the train passed along they would leisurely fly a few yards, and then settle on the ground again. I only saw the bird once in the Clarence River district of New South Wales. It is very rare in that part, as the locality is not suited to it.
604	591	1	One egg, of a green variety, forming a clutch in this case, as incubation was four days old. It was taken by C. Woodlands in the Nicholson River district, North-west Queensland, on the 17th of October, 1898. Frequently only one egg is laid. It measures = 2·92 × 2·12, and is smaller than those of the pair in the former set.
665	702	4	YELLOW-LEGGED SPOONBILL, *Platibis flavipes*, Gould. (With notes on the Koala or Australian Native Bear, *Phascolarctos cinereus*.) This splendid set of four eggs was taken at Lavadia, near South Grafton, Clarence River, New South Wales, by W. McEnerny and myself, on the 20th of September, 1896. The nest was rather a flat structure of sticks, lined with green Eucalyptus leaves, and measured nineteen inches across, being placed in a Swamp Mahogany (*Eucalyptus robusta*) at a height of 35 feet. The four eggs were quite fresh when taken, and are devoid of markings, with the exception of a few nest stains. Two other nests were found in adjoining trees on the edge of the swamp, but contained incomplete clutches. These Spoonbills were very plentiful about Grafton some seasons, and usually arrived in company with the White Ibises, making the swamps about Lavadia their stronghold. During October of 1899, they were also found breeding near Lawrence, Lower Clarence River district, and several sets of their eggs were taken there by L. Vesper, the nests in this case being placed in Swamp Oaks (*Casuarina glauca*). Specimen A. measures = 2·90 × 1·80. Specimen B. = 2·76 × 1·80. An opportunity here occurs for me to make a few remarks with reference to the recent press comments concerning the wanton destruction of the Australian Native Bear or Koala (*Phascolarctos cinereus*), and as this destruction is apparently about to receive a very much needed check, I think my observations will not be out of place. They were quite familiar objects in the forests, particularly in my early nesting days, but of late years, during my ramblings, I have rarely come across them. They used to be quite numerous amongst the tall Eucalyptus trees about the swamps and ridges at Lavadia, and other parts of the Clarence River district of New South Wales. My brother and I have frequently come across them comfortably nestled in an upright fork of a tree, and perhaps within only a few feet of the nest we were after. They hold on most tenaciously, and if you attempt to capture them will climb to the topmost branch. They are, however, harmless creatures, and it is really grievous to see the way they are at times hunted and killed; when in pain or frightened, they utter a pitiful child-like cry, and at other times a peculiar guttural grunt or noise. I was successful in obtaining an excellent photograph of a splendid specimen from life near Grafton, N.S.W., and the picture is reproduced as the frontispiece to this volume. It would appear, however, that this Native Bear is being rapidly exterminated, especially in New South Wales, a fact which is much to be regretted. Indeed, if there has been a law in existence for their protection, it has been in name only, and certainly not in effect. The last one I met with was at Ourimbah, near Gosford, N.S.W., during November of 1905, and that was actually the first I had seen for several years previously. I am credibly informed by friends in the Mudgee, Armidale, Cooma, and Newcastle districts that this ornamental bush creature is now rarely ever seen, and is fast becoming extinct, a fact to be deeply deplored, for all lovers of nature will much regret the disappearance of this species of fauna, which so admirably adorns our Australian bush, and at one time was a source of the greatest pleasure for enthusiastic oologists in the procedure of their naturalistic studies. I can recollect in 1883 they were very plentiful near Toowoomba, on the Darling Downs, Queensland. If not hunted or interfered with they become quite tame, often coming into houses and country schools, naturally causing great amusement. They, of course, get about on all fours, and are quite comical in their movements. They have very sharp claws, and their food consists chiefly of Gum or Eucalyptus leaves.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			It was not at all uncommon in the latter locality to find three or four in one tree, and one was frequently seen perched here and there on the top of a telegraph pole. But all this seems to be changed now, as I learn from friends living in various parts of New South Wales and Queensland that a Native Bear is very seldom seen, the dire result, no doubt, of the work of trappers and hunters shooting them for the market, to provide material for bearskin rugs, etc., and also as a means of livelihood. Before closing I might mention that when at Jondaryan, Queensland, in 1888, I came across several very fine specimens of the piebald variety of this bear. The law in force for the protection of certain animals and birds is openly and flagrantly violated, and in most of the large cities of the Commonwealth substantial evidence in support of this statement may be found in the quantities of skins exposed for sale, as is also the case in the number of those of the Platypus (*Ornithorhynchus anatinus*) disposed of, to which might further be added the enormous quantities of beautiful tail plumage of our Lyre Birds, which are *supposed* to be safe-guarded by the Birds' Protection Act of New South Wales.
666	701	4	BLACK-BILLED SPOONBILL, *Platalea regia*, Gould. (This bird is also known as the Royal and Black-faced Spoonbill.) Set of 4 eggs, which was one of the first clutches recorded. They were taken from a nest in a swamp in the Nicholson River district, North-west Queensland, by E. Drew, on the 25th of April, 1898. See bottom paragraph in A. J. Campbell's book, page 947, *re* this set. It seems remarkable that this species should lay its eggs on the rushes in the swamps, while the Yellow-legged Spoonbill makes a nest of sticks, which it places in a tree; and another strange thing is that it usually breeds in company with the White Ibises. The Spoonbill was twice flushed from the nest, which contained the above set of four eggs, before they were taken. The structure was simply the reeds bent down into a platform a little above water-mark, and the eggs laid thereon. They were slightly incubated. Four more of the birds were observed on the same swamp, but although they were watched carefully, no other nests were found. White Ibises were breeding at the same place. The eggs are dull or chalky-white, and moderately marked with reddish-brown. Specimens A. and B. possess more markings than the others, and measure as follows :—Specimen A. = 2·52 × 1·77. Specimen B. = 2·47 × 1·75.
667	701	2	Beautiful pair of eggs, which are much more elongated than those of the previous set, and possess more markings. They were taken on a swamp at Lavadia, near South Grafton, Clarence River, N.S.W., by A. Amos and myself, where we found these birds breeding in company with the White Ibises, and were successful in taking the eggs of both species. Their nests were alike, being simply the rushes trampled down, platform shaped, on which the eggs were laid. The Spoonbill's eggs varied from 2 to 4 for a sitting, though in one instance we took five eggs from a nest. (See Data No. 667A.) They were of various shapes and sizes, several being boldly blotched, resembling some well-marked eggs of the Whistling Eagle (*Haliastur sphenurus*), while others again only possessed a few minute dots. They were taken on the 4th of November, 1904. Specimen A. measures = 2·83 × 1·72. Specimen B. measures = 2·70 × 1·75. Specimen B. possesses numerous markings at the larger end, while in Specimen A. they are very small and scattered all over the surface. As is the case with the former set of 4 eggs, these two have the surface of the shell minutely pitted all over, in fact all the eggs of the *Ptalateæ* order have more or less a pitted shell. These birds were also found breeding on the same swamps at Lavadia, during October of 1903.
667A	701	5	This is the only set of *five* of these rare eggs that I have ever seen. They are most beautifully blotched specimens, and were taken by A. Amos and myself from a swamp at Lavadia, near South Grafton, Clarence River, N.S.W., on the 4th of November, 1904. They are not nearly so elongated as those of the previous set. Specimen A. is beautifully blotched at the larger end with reddish-brown, and resembles a well-marked egg of the Whistling Eagle; it measures = 2·43 × 1·73. Specimens B., C., D. and E. are well capped with brown and purplish-grey markings at the larger ends, while marks of the same colour are scattered over the remainder of the shell. They measure as follows :—Specimen B. = 2·52 × 1·73; Specimen C. = 2·53 × 1·72; Specimen D. = 2·58 × 1·71; Specimen E. = 2·60

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

× 1·63. The late John Gould states "that this fine species is tolerably common on the eastern and northern coasts of Queensland; and although a rare visitant there, it had been found within the colony of New South Wales." All his specimens were procured at Moreton Bay, and he had seen others which were collected near Port Essington, North Australia. The bird usually confines itself to swamps and marshy inlets near the sea, but sometimes it is found a considerable distance inland on the banks of rivers and lakes. From specimens which I dissected I found that their food consists chiefly of aquatic insects, very young fish, worms, grass, and small fresh water shell fish, such as young mussels, *Unio australis*, *Unio depressus*, and also smaller species, comprising *Melania Balonnensis*, *Corbicula sublavigata*, *Physa producta*, *Limnea lessoni*, *Modiolarca subtorta*, *Planorbis fragilis*, *Segmentina australiensis*, *Hydrobia Brazieri*, etc., all of which I have collected alive in the fresh water creeks and swamps of the Clarence River district, forming food not only for Spoonbills, but numerous other waterfowl. In the afore-mentioned swamps I noticed small glossy beetles of the *Chrysomelidæ* family very abundantly distributed on the rushes, and found that they formed a good food supply for this and many other of the swamp birds. The plumage of this Spoonbill is white, while its bill, face, legs and feet are black. On the crown of the head, and over each eye, is a triangular mark of orange; the eyes being red. Its total length is about 29 inches; and the large peculiar spoon-like bill, which is 8½ inches in length, is beautifully adapted for the collection of its food. Its habits are very similar to those of the Yellow-legged Spoonbill, with the exception that it lays its eggs on the rushes in the swamps, and not in a nest composed of sticks placed in a tree, as is the case with the latter species.

ABORIGINES OF THE CLARENCE RIVER DISTRICT OF NEW SOUTH WALES.
Nymboi Jack, whose name frequently appears in these pages, will be seen in the centre, with his vine and tomahawk, ready to do some tree climbing.

668	698	3

WHITE IBIS,
Ibis molucca, Cuvier.

Set of 3 eggs, which were taken on a swamp at Lavadia, near South Grafton, Clarence River, N.S.W., on 4th November, 1904, by A. Amos and myself. We found these birds breeding in company with the Black-billed Spoonbill, and took fifteen clutches of their eggs. They are a pure white, in some instances nest stained, and like those of the preceding species, they are finely pitted all over. I also

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
			found these birds breeding in the Clarence River district, during October of 1897. Specimen A. measures = 2·71 × 1·70.
669	699	3	STRAW-NECKED IBIS, *Carphibis spinicollis*, Jameson. Set of 3 eggs, taken with several other sets from a swamp near Ulmarra, Clarence River, N.S.W., by Sid. W. Jackson, on the 19th of October, 1897. The nest was like that of the White Ibis, a trampled-down platform of rushes in the swamp, a little above watermark. The eggs are very similar to those of the latter species, being of a chalky white, but the pittings on the shell are not quite so pronounced. Specimen A. measures = 2·66 × 1·70. Specimen B. measures = 2·67 × 1·67. Specimen C. measures = 2·47 × 1·68. When feeding, the grassy flats about Grafton are often covered with these Ibises, but the white species seem to keep nearer the margins of the swamps.
670	7	3	GLOSSY IBIS, *Plegadis falcinellus*, Linnæus. Set of 3 eggs, very beautiful specimens, which are of a rich deep bluish-green, and much more handsome than all others of this colour laid by different species in Australia. It seems rather inconsistent that this beautiful Ibis should lay blue eggs, and the other four species of its order (*Ptalateæ*) lay white specimens. The nest was constructed of sticks, placed on a small tree leaning out over a narrow creek. Several others containing eggs were taken in the same locality. Taken by H. Scotney, at Kidnapper Creek, South-west Queensland, on the 13th of October, 1900. This is the only set of these rare and lovely eggs that has ever come under my notice during my long experience collecting. They are minutely pitted all over, and measure as follows:—Specimen A. = 2·01 × 1·43. Specimen B. = 1·92 × 1·47. Specimen C. = 1·92 × 1·45.
671	590	2	CRANE OR NATIVE COMPANION, *Antigone australasiana*, Gould. (This bird is known to the aborigines of the Clarence River district as "Bu-allum-gum.") Beautiful clutch of 2, the ground colour of which is a dark cream, or light-drab, blotched and spotted all over with umber and purplish-brown They were taken on Molly Station, Western New South Wales, by J. Watson, on the 2nd of August, 1896. I have only taken the eggs of this bird on one occasion, and that was near South Grafton, Clarence River, N.S.W., on the 10th of October, 1892. The shell is very clearly pitted all over. Of the set under notice, these are the measurements:—Specimen A. = 3·71 × 2·49. Specimen B. = 3·42 × 2·36.
672	590	2	Set of 2 eggs, which are remarkable specimens, as they are *snow-white*, and with the exception of a few small dull dots on specimen B., they are totally free from markings, and being glossy present the appearance of large white china eggs. This set is from the Tropics, and devoid of colour, while the former clutch (No. 671) is highly coloured and heavily marked, and comes from a cooler region, viz., New South Wales. Taken by C. Woodlands in the Nicholson River district, North-west Queensland, on the 24th of September, 1897. It is a most interesting clutch. Specimen A. measures = 3·72 × 2·57. Specimen B. measures = 3·77 × 2·48. In the Clarence River district I have frequently seen these stately birds doing their extraordinary dance.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.

Drawer T. Bottom Drawer on right side of Cabinet.

673 719 1

BLACK-NECKED STOCK OR JABIRU,

Xenorhynchus asiaticus, Latham.

One very rare egg, of a clutch of two, taken by my friend C. Woodlands, in the Nicholson River district, North-west Queensland, on the 25th of April, 1898. Unfortunately one of the clutch got badly damaged coming through the post, and I passed it out of the collection in 1901. The measurement given by A. J. Campbell in his book at the foot of page 970, for the remaining egg described here, is = 2·80 × 2·10. I make the measurements just a fraction smaller, thus = 2·78 × 2·09. C. Woodlands, in writing to me from the Nicholson River, North-west Queensland, on the 29th April, 1898, says:—"I was greatly disappointed with the Jaberoo's eggs, and I think you will be likewise. They appear to be so insignificant, both in size and colour, for such a large and handsome bird, that I do not know what to say about them. The niggers throughout have assured me there would be no doubt about getting plenty of the eggs at 'wind time,' *i.e.*, south-east trades. Well these winds have not yet set in, but my black boys have returned unsuccessful in finding more, after being 10 days out searching for them, and they cast a gloom over me by saying '*too many picaninni jump up*,' meaning young birds. I call most birds by the name as known to the tribe; Jaberoos, for instance, they know as '*Catonga*.' By adopting this plan even other tribes can follow me. Many intelligent black boys described the number of eggs in a sitting as 'full up' or 'big mob,' meaning a quantity; on the other hand many equally intelligent boys invariably hold up two fingers, while all agree that the birds either build on the Mangroves low down, or in a tall tree 'all the same Eagle Hawk.' The set of 2 eggs posted was taken from a large stick nest placed high up in a big Gum tree (Eucalypt.)" The egg which got damaged coming through the post was a little larger than the specimen now in the collection, of which I have given the measurements above. It is very small for such a large bird to lay, and is a round oval in shape, and of a dirty white colour, free from markings, except nest stains. The shell is rather coarse and granular, and slightly glossy. If the ends are examined carefully with a lens, here and there will be seen isolated pittings, as if made with the point of a pin. I saw this fine bird on the Clarence River swamps of New South Wales during August of 1891, but have not seen it since. The only eggs of the Jabiru recorded from the latter locality, were taken by John L. Ayers, during August of 1887, and the pair measured in inches:—Specimen A. = 2·93 × 2·10; Specimen B. = 2·92 × 2·12. The Jabiru flies very slowly, and measures when fully extended, from the feet to the tip of the bill, a little over six feet, the measurement across the open wings being in one case seven feet five inches. The weight of the bird averages from 10½ to 14 pounds.

674 711 4

BLACK SWAN,

Chenopsis atrata, Latham.

(This bird is known to the aborigines of the Clarence River district as "Ul-der-gun.")

Set of 4 eggs, taken on 26th August, 1894, on a swamp east of the Lake, near South Grafton, Clarence River, N.S.W., by W. McEnerny, Frank and Sid. W. Jackson. Two other nests were found, one containing one egg, and the other two, which we left until the following week, in order to get clutches. However, on revisiting the spot seven days later, we found to our great disappointment the eggs had disappeared, and the nests were pulled to pieces. Probably the duck shooters came across them, and deprived us of our bespoken specimens. The nests were very large, and constructed of sticks, masses of rushes, and aquatic reeds heaped up well above the water, while the hollows or centres of them were lined with dead leaves of the Swamp Mahogany, and a few green ones of the Red Eucalyptus. Specimen A. measures = 4·03 × 2·66.

Data No.	No. in A. J. Campbell's Book.	No. of Eggs.	
675	762	3	EMU, *Dromæus novæ hollandiæ*, Latham. Three eggs, taken near Cunnamulla, South-western Queensland, during season 1896, by S. Robinson. Specimen A. measures = 5·44 × 3·63.
676	763	2	SPOTTED EMU, *Dromæus irroratus*, Bartlett. Two eggs, taken on the north coast of Western Australia during season 1898. I received them from Dudley Le Souëf, of the Zoological Gardens, Melbourne. They are darker, and the granulations smaller and more closely set together, than in those of the common Emu. Specimen A. measures = 5·01 × 3·36. Specimen B. measures = 5·01 × 3·48. This Spotted Emu is confined to the west and north-west of Australia, and the interior portions of South Australia.
677	762	1	EMU, *Dromæus novæ hollandiæ*, Latham. One egg, a *white* specimen, which was found in a nest with others of the normal colouring. It was not taken from the the oviduct of the bird as some might suppose. The man who found it has taken them in nests on several occasions. The shell is rough and granulated, while beneath the white surface layer there is one of blue, and under that white again. It was found by Jos. George, during season 1900, near Mount Harris, Macquarie River, N.S.W., and measures = 5·23 × 3·44. The Zoological Society has lately added to its collection at Moore Park, Sydney, a bird which is indeed a *rara avis*. This interesting zoological curiosity is a White Emu, and strange to say it was found at Cobar, N.S.W., not far from Mount Harris, from which place the white egg under notice was taken. Though instances of albinos occur with more or less frequency in numbers of species of animal life, they are of great rarity among Emus.
678	765	1	CASSOWARY, *Casuarius australis*, Wall. One egg, taken from a nest in the scrubs near Cairns, North Queensland, by Archie Craig, on the 19th of August, 1891, during a survey expedition. This bird, which is confined to the coastal scrubs of the Cape York Peninsula, Queensland, has now become very scarce, and its eggs are seldom met with. At one time they were very plentiful, and formed a good food supply for the aborigines. This rare specimen measures = 5·25 × 3·58, and is of a beautiful light pea-green colour, being quite different to those of the Emu. One well known Australian oologist, viz., Dudley Le Souëf, who had been trying to obtain one of these eggs for many years, only succeeded in 1898. During his visit to England that year, to attend the Zoological Congress at Cambridge, he was invited by the Hon. Walter Rothschild to inspect his grounds and museum at Tring, the latter being the largest private institution of its kind in the world. Among the many birds alive there, and breeding in captivity, were a pair of Australian Cassowaries, the hen bird of which had been sitting on some eggs for a consider able time, but they were evidently unfertilized. He was surprised, however, when the honourable gentleman presented him with these rare specimens for his collection at Melbourne, in far off Australia. He had actually to go to London to collect the eggs of the Queensland Cassowary.
679	—	1	BENNETT'S CASSOWARY OR MOORUK, *Casuarius Bennetti*, Gould. (See Gould's "Handbook to the Birds of Australia," Vol. ii., page 561, spm. 18.) Although this is not an Australian bird, I have decided to keep this rare egg in the collection, firstly, because it belongs to a Cassowary which is very rapidly becoming extinct, and, secondly, on account of it inhabiting New Britain, north of Queensland. Probably the bird existed in the Cape York Peninsula of Queensland, before New Guinea and New Britain were cut one from the other, and separated by water from Australia. That New Guinea and Australia were at one time united is

SID. W. JACKSON tree climbing with tree-irons or spurs, at Chatswood, Sydney. When collecting in the Clarence and Richmond River districts of N.S.W., the spurs were frequently brought into operation, being found very useful, but of course only in cases where the tree was not too thick, and the climber was enabled with safety to obtain a firm hold.

acknowledged to be correct. In assuming this, one important connecting link is that the land shells (*snails*) found in the scrubs at the northern portion of the Cape York Peninsula, are identical with some of the species found in the scrubs on the south-coast of New Guinea. Adverting to the egg under notice, which was collected at New Britain during season of 1896, it is not surprising to find that it is very like that of the Queensland Cassowary, being of a greenish-white ground colour, covered with beautiful pea-green granulations, which are finer and smoother than in most specimens laid by the latter bird. On this egg, here and there, the granulations are confluent, and assume the form of straight ridge-like lines without interstices, along both sides being narrow open spaces of the greenish-white ground colour. Out of the sixteen of these straight ridges, the longest measures = 2·64 inches, and is only ·07 of an inch wide, and gives the egg quite a "cracked" appearance at first glance. The specimen under notice measures in inches = 5·22 × 3·65. The late Dr. Geo. Bennett, M.D., F.Z.S., etc., of Sydney, writing on this species in 1857, states:—"I consider this to be one of the most important additions to ornithology I have ever brought before the scientific world. It is a member of nearly an extinct family of birds, a remnant of a group which played an important part in the economy of nature in periods long gone bye." The Mooruk is rather a smaller and shorter bird than the Cassowary of the Cape York Peninsula of Queensland, but the eggs are much alike both in size and colour, while the bird frequents the same class of scrubby situations as the Queensland species. The first pair of birds were found by Captain Devlin at New Britain, in 1856, and they arrived alive at the Zoological Societies Gardens, in London, on the 29th of May, 1858.

THE JACKSONIAN OOLOGICAL COLLECTION.

ALPHABETICAL INDEX.

A.

Adelaide Rosella Parrot 27
Albatross, Black-browed.. .. 58
,, Short-tailed 58
,, Wandering 57
,, White-capped.. .. 58
Albert Lyre Bird 134-135
Albert Rifle Bird of Paradise .. 124
Allied Fruit Pigeon 12
Australian Dotterell 34
Australian Raven 137
Avocet, Red-necked 118

B.

Babbler 20
,, Chestnut-crowned .. 20
,, Red-breasted 20
,, White-browed 20
Bald Coot 141
Bald Coot, Blue 142
Banded Finch 4
Banded Stilt 150
Banded Wren 5
Banks' Dove Petrel 60
Bare-eyed Cockatoo 24
Barnard Brush Turkey 153
Barred Cuckoo Shrike .. 92
Barred-shouldered Dove 13
Beautiful Parrakeet 28
Bee Eater 137
Bell Bird (*Oreoica*) .. 23
Bell Miner 87
Betcherrygah or Warbling Grass Parrakeet 29
Bird of Paradise, Albert 124
,, ,, ,, of N. S. Wales .. 115-123
,, ,, ,, Victoria .. 123
Bittern 143
,, Little Mangrove.. .. 143
,, Yellow-necked Mangrove .. 144
Black and White Fantail .. 75
Black and White Swallow .. 71
Black Cockatoo, Red-tailed .. 24
Black Cormorant, Large.. .. 52
,, ,, Little.. 52
Black Duck .. 55

B.—*Continued.*

Black Falcon 43
Black Honey Eater 82
Black Moor Hen 142
Black Oyster Catcher 62
Black Swan 159
Black Tree Creeper 10
Black-backed Gull 61
Black-backed Magpie 138-139
Black-backed Quail 33
Black-backed Wren 5
Black-banded White Face .. 67
Black-billed Spoonbill 156
Black-breasted Plover 147
Black-breasted Quail 33
Black-breasted Song Lark .. 62
Black-browed Albatross 58
Black-capped Tree Runner .. 66
Black-cheeked Falcon 42
Black-chinned Honey Eater .. 83
Black-faced Cuckoo Shrike .. 91
Black-faced Flycatcher 75-76
Black-faced Wood Swallow .. 8
Black-fronted Dotterell 34-35
Black-headed Pardalote 1
Black-naped Tern 50
Black-necked Stock or Jabiru .. 159
Black-rumped Grass Finch .. 4
Black-shouldered Kite 40-41-42
Black-tailed Native Hen .. 142
Black-tailed Parrakeet 27
Black-tailed Thickhead.. .. 9
Black-throated Butcher Bird .. 140
Black-throated Fly Eater .. 73
Black-throated Grass Finch .. 4
Black-throated Grebe 152
Black-throated Coach Whip Bird 23
Black-winged Crow Shrike .. 140
Blood Bird Honey Eater .. 81
Blood-stained Cockatoo.. .. 24
Blue Bald Coot 142
Blue Flycatcher 75
Blue Kingfisher 136
Blue Wren 5-6
,, ,, Long-tailed 5

B.—*Continued.*

Blue-bellied Lorikeet 25
Blue-faced Honey Eater .. 84
Blue-faced Lorilet 28
Blue-winged Grass Parrakeet .. 27
Boobook Owl 124
Bower Bird, Queensland .. 114
,, ,, Regent .. . 111 to 114
,, ,, Satin .. ..106 to 111
,, ,, Spotted 114
Bristle Bird 20-21
Broad-billed Dove Petrel .. 61
Broad-tailed Tit 2
Bronze Cuckoo 11-69
,, ,, Little 72
,, ,, Narrow-billed 3-11-69-70-78
Bronze-winged Pigeon 12
Brown Flycatcher 76-77
,, ,, Lesser .. 77
Brown Fly Eater 73
Brown Hawk.. 49
Brown Hawk, Striped 49
Brown Honey Eater 83
Brown Kingfisher 135
Brown Quail 32
Brown Scrub Wren 63-64
Brown Thrush 90
Brown Tit 2
Brown Tree Creeper 10
Brown-backed Honey Eater .. 83
Brown-headed Honey Eater .. 84
Brown-winged Tern 51
Brush or Scrub Turkey .. 153-154
,, ,, ,, Barnard .. 153
Brush Bronze-winged Pigeon .. 12
Brush Wattle Bird 86
Buff-bellied Thrush 90
Buff-rumped Tit 2
Bush Chat, Orange-fronted .. 70
,, ,, Tri-coloured .. 70
,, ,, White-fronted .. 70
,, ,, Yellow-breasted .. 71
Bush Curlew 147
Bush Lark 63
Bustard or Wild Turkey .. 154

INDEX—*Continued.*

B.—*Continued.* PAGE.

Butcher Bird, Black-throated .. 140
,, ,, Grey .. 141
,, ,, Pied .. 140
,, ,, Tasmanian .. 141
,, ,, White-winged .. 140

C.

Campephaga, Jardine's 92-93-94
Canary, Native .. 72
Cape Barren Goose .. 55
Caspian Tern 49
Cassowary 160
,, Bennett's 160-162
Cat Bird 114-115
,, Spotted 115
Caterpillar Catcher 92-93-94
,, ,, Pied .. 95
,, ,, White shouldered 96
Channel Bill 138-139
Chat, Orange-fronted Bush .. 70
,, Tri-coloured Bush .. 70
,, White-fronted Bush .. 70
,, Yellow-breasted Bush .. 71
Chestnut-backed Ground Bird .. 97
Chestnut-bellied Quail 33
Chestnut-breasted Cuckoo .. 4
Chestnut-breasted Finch .. 3
Chestnut-crowned Babbler .. 20
Chestnut-eared Finch 1
Chestnut-rumped Ground Wren .. 9
Chestnut-rumped Pardalote .. 2
Chestnut-rumped Tit 2
Chough, White-winged 106
Coach Whip Bird 24
,, Black-throated 24
.. Northern .. 24
Cockatoo, Bare-eyed .. 24
,, Blood-stained .. 24
,, Gang Gang 25
,, Long-billed .. 24
,, Parrakeet 27
,, Red-tailed Black .. 24
,, Rose-breasted .. 24
,, White 24
Comb-crested Parra or Jacana 36-37-38-39
Common or Grey Heron .. 146
Common Sandpiper .. 36
Coot 142
,, Bald 141
,, Blue Bald 142
Cormorant, Large Black .. 52
,, Large Pied 52
,, Little Black .. 52
,, Little Black and White 53-54
,, White-breasted .. 52
Coucal, or Swamp Pheasant .. 29
Crake, Little 32

C.—*Continued.* PAGE.

Crake, Spotted 31
,, White-browed 32
Crane, or Native Companion .. 158
Crane, White 144
Creeper, Black Tree 10
,, Brown Tree 10
,, White-throated .. 10
Crescent Honey Eater 82
Crested Hawk 48
Crested Penguin 58
Crested Pigeon 14
Crested Tern 49-50
,, ,, Lesser 51
Crimson Parrakeet 27
Crimson-winged Lory 25
Crimson Finch 4
Crow 138
,, Short-billed 138
,, Shrike, Pied 140
,, ,, Black-winged .. 140
,, ,, Grey 140
,, ,, Hill 140
,, ,, Leaden 140
,, ,, Sooty 140
Cuckoo, Bronze 11-69
,, Channel Bill 138-139
,, Chestnut-breasted .. 4
,, Coucal 29
,, Fantailed .. 5-11-21-63-65-102
,, Koel 100-101
,, Little Bronze 72
,, Narrow-billed Bronze, 3-11-69-70-78
,, Pallid .. 8-74-80-83-86-88
,, Square-tailed 5-77-78-79
Cuckoo Shrike, Barred 92
,, ,, Black-faced .. 91
,, ,, Ground 91
,, ,, Little 92
,, ,, Small-billed .. 91
,, ,, White-bellied .. 92
Curlew, Bush 147
Curlew, Sea 150-151

D.

Darter, Snake-necked 54
Diamond Sparrow 4
Diving Petrel 60
Dollar Bird or Roller 30
Dotterell, Australian 34
,, Black-fronted .. 34-35
,, Hooded 35
,, Red-capped 34
,, Red-kneed 34
,, Ringed 35
Dove, Barred-shouldered .. 13
,, Ground 13
,, Little 13

D.—*Continued.* PAGE.

Dove Petrel 60
Dove Petrel, Broad-billed .. 61
Dove Petrel Banks' 60
Dragoon Bird 96-97
Drongo 20
Duck, Black 55
,, Freckled 56
,, Mountain 55
,, Musk 55
,, Pink-eared 57
,, Plumed Whistler .. 57
,, Shoveller 55
,, Teal 56
,, Teal, Grey 56
,, Teal, White-quilled Goose .. 56
,, Whistling 57
,, White-eyed 56
,, Wood 55
Dusky, Fantail 79
Dusky, Robin 6
Dusky Miner 88

E.

Eagle, Little 48
,, Wedge-tailed 44
,, Whistling 46-47
,, White-bellied Sea .. 44-45
,, White-headed Sea .. 46
Eastern Swallow 72
Egret, Large 144
,, Little Spotless 144-145
Emu 160
,, Spotted 160
Emu Wren 6

F.

Fairy Dove Petrel 60
Fairy Martin 71
Fairy Penguin 59
Falcon, Black-cheeked 42
,, Black 43
Grey 43
,, Little 43
Fantail, Black and White .. 75
,, Dusky 79
,, Northern Black and White 75
,, Northern 79
,, Rufous 79-80
,, Western 79
,, White-fronted 79
,, White-shafted .. 78-79
Fantailed Cuckoo .. 5-11-21-63-65-102
Fig Bird 98
,, ,, Yellow-bellied .. 99
Field Wren 62
,, ,, Little 63
,, ,, Striated 62
Finch, Banded 4

INDEX—*Continued.*

F.—*Continued.*

	PAGE.
Finch Black-rumped Grass ..	4
,, Black-throated Grass ..	4
,, Chestnut-breasted ..	3
,, Chestnut-eared	4
,, Crimson	4
,, Fire-tailed	4
,, Gouldian Grass	3
,, Long-tailed Grass ..	3
,, Plum-head	4
,, Red-browed	3
,, Ringed	4
,, Spotted-sided	4
Fire-tailed Finch	4
Flame-breasted Robin	7
Flock Pigeon	14
Flycatcher, Black-faced ..	75-76
,, Blue	75
,, Brown	76-77
,, ,, Lesser ..	77
,, Leaden-coloured ..	74
,, Restless	74
,, Satin	74
,, Shining	74
,, Spectacled	77-78
,, White-bellied ..	78
Fly Eater, Black-throated ..	73
,, Brown	73
,, Large-billed.. ..	73
,, Southern	73
,, White-throated ..	72
Forest Kingfisher	136
Forty-spotted Pardalote ..	1
Freckled Duck	56
Freckled Frogmouth	126
Friar Bird	88-89
,, ,, Helmeted	89
,, ,, Leach's	89
,, ,, Silvery-crowned ..	89
,, ,, Yellow-throated ..	89
Frigate Bird, Lesser	62
Frogmouth, Freckled	126
,, Marbled	126
,, Plumed	126
,, Tasmanian ..	126
,, Tawny	125
Fruit Pigeon, Allied	12
,, ,, Purple-breasted ..	13
,, ,, Purple-crowned ..	13
,, ,, Red-crowned ..	13
,, ,, Rose-crowned ..	14
,, ,, White-headed ..	15-16
Fulvous-fronted Honey Eater ..	82
Fuscous Honey Eater	81

G.

	PAGE.
Gang Gang Cockatoo	25
Gannet..	52

G.—*Continued.*

	PAGE.
Giant Petrel	59
Glossy Ibis	158
Goose, Cape Barren	55
,, Pied	55
Goose Teal, White-quilled ..	56
Goshawk	40
,, Grey	39
,, Lesser	40
,, Lesser White.. ..	39
,, Red..	48
,, White	39
Gouldian Grass Finch	3
Grass Bird	68
,, ,, Tawny	68
Grass Finch, Black-rumped ..	4
,, ,, Black-throated ..	4
,, ,, Gouldian.. ..	3
,, ,, Long-tailed ..	3
Grass Parrakeet	27
,, ,, Blue-winged ..	27
,, ,, Orange-bellied ..	28
,, ,, Red-shouldered ..	29
,, ,, Warbling ..	29
Grass Warbler	68-69
Grass Wren	63
,, ,, Striated	63
Grebe, Black-throated	152
,, Hoary-headed	152
,, Tippet	151
Green Pigeon, Little	14
Green-backed White Eye ..	67
Grey Butcher Bird	141
Grey Crow Shrike	140
Grey Falcon	43
Grey Goshawk	39
Grey Heron	146
Grey Jumper	20
Grey Noddy Tern	51
Grey Thrush	90
Grey Teal	56
Grey-backed Storm Petrel ..	60
Grey-breasted Shrike Robin ..	7
Grey-breasted Wood Swallow ..	8
Grey-tailed Thickhead	9
Ground Bird, Chestnut-backed ..	97
,, ,, Spotted	97
Ground Cuckoo Shrike	91
Ground Dove	13
Ground Lark	63
Ground Thrush	97
,, ,, Large-billed ..	98
,, ,, Russet.. ..	98
Ground Wren, Chestnut-rumped..	9
Gull, Black-backed	61
,, Gould's Silver	61
,, Great Skua	61

G.—*Continued.*

	PAGE.
Gull, Pacific	61
,, Silver	61
Gull-billed Tern	51

H.

Harmonious Thrush	90
Harrier, Spotted	49
,, or Swamp Hawk ..	49
Hawk, Crested	48
,, Brown..	49
,, Eagle	44
,, Nankeen Kestrel ..	43
,, Sparrow	40
,, Striped Brown	49
,, Swamp	49
Holmeted Friar Bird	89
Hen, Native	142
,, Black-tailed Native ..	142
Heron, Grey	146
,, Night or Nankeen ..	146
,, Pacific or White-necked ..	145
,, Reef	146
,, White-fronted	146
,, White-necked	145
Hill Crow Shrike	140
Hoary-headed Grebe	152
Honey Eater, Bell Miner ..	87
Honey Eater, Black	82
,, ,, Black-chinned ..	83
,, ,, Blood	81
,, ,, Blue-faced ..	84
,, ,, Brown	83
,, ,, Brown-backed ..	83
,, ,, Brown-headed ..	84
,, ,, Brush Wattle Bird	86
,, ,, Crescent	82
,, ,, Dusky Miner ..	88
,, ,, Fulvous-fronted ..	82
,, ,, Fuscous	81
,, ,, Helmeted Friar Bird	89
,, ,, Leather Head ..	88
,, ,, Little Friar Bird ..	89
,, ,, Little Wattle Bird..	85
,, ,, Long-billed ..	82
,, ,, Moustached ..	82
,, ,, Pied	84
,, ,, Red-throated ..	83
,, ,, Red Wattle Bird ..	86
,, ,, Rufous-breasted ..	83
,, ,, Silvery-crowned Friar Bird	89
,, ,, Soldier Bird ..	88
,, ,, Spine Bill ..	84
,, ,, Singing	80
,, ,, Spiny-cheeked ..	86
,, ,, Striped	80
,, ,, Strong-billed ..	83
,, ,, Western White-naped	84

INDEX—*Continued.*

H.—*Continued.* PAGE.

Honey Eater, White-bearded .. 82
,, ,, White-breasted .. 82
,, ,, White-browed Spine Bill 84
,, ,, White-cheeked .. 82
,, ,, White-eared .. 81
,, ,, White-fronted .. 82
,, ,, White-naped .. 83
,, ,, White-plumed .. 81
,, ,, White-quilled .. 85
,, ,, Yellow-eared .. 86
,, ,, Yellow-faced .. 80
,, ,, Yellow-spotted .. 80
,, ,, Yellow-throated Friar Bird 89
,, ,, Yellow-throated .. 81
,, ,, Yellow-throated Miner 88
,, ,, Yellow-tufted .. 80
,, ,, Yellow Wattle Bird 85
Hooded Dotterell 35
,, Robin.. 6

I.

Ibis, Glossy 158
,, Straw-necked 158
,, White 157

J.

Jabiru 159
Jacana, or Comb-crested Parra .. 36 to 39
Jackass, Laughing .. 135
Jardine's Campephaga 92-93-94
Jumper, Grey 20

K.

Kestrel, Nankeen 43
King Lory 25
King Penguin.. 58
King Quail 33
Kingfisher, Blue 136
,, Brown 135
,, Forest 136
,, Leach 136
,, Purple 137
,, Red-backed 136
,, Sacred 136
,, Tasmanian 137
,, White-tailed .. 136
Kite 40
,, Black-shouldered 40-41-42
,, Letter-winged 42
,, Square-tailed 40
Koel or Flinder's Cuckoo .. 100-101

L.

Lambert's Wren 5
Large-billed Fly Eater 73
Large-billed Ground Thrush .. 98
Large-billed Scrub Wren .. 65
Large Black Cormorant .. 52
Large-headed Robin 7

L.—*Continued.* PAGE.

Large Pied Cormorant 52
Large-tailed Nightjar 127
Lark, Black-breasted Song .. 62
,, Bush 63
,, Ground 63
,, Magpie 22-23
,, Rufous Song 63
,, Song 62
Laughing Jackass 135
Leach Kingfisher 136
Leaden Crow Shrike 140
Leaden-coloured Flycatcher .. 74
Leather Head 88
Lesser Brown Flycatcher .. 77
Lesser Crested Tern 51
Lesser Frigate Bird 62
Lesser Goshawk 40
Lesser Large-headed Robin .. 7
Lesser Masked Owl 125
Lesser Noddy 51
Lesser Pitta 97
Lesser Rufous-breasted Thrush .. 91
Lesser White Goshawk.. .. 39
Letter-winged Kite 42
Lewin or Slate-breasted Rail .. 31
Little Black Cormorant.. .. 52
Little Black and White Cormorant 53-54
Little Bronze Cuckoo 72
Little Crake 32
Little Cuckoo Shrike 92
Little Dove 13
Little Eagle 48
Little Falcon 43
Little Field Wren 63
Little Friar Bird 89
Little Green Pigeon 14
Little Lorikeet . .. 28
Little Mangrove Bittern . 143
Little Nightjar 126-127
Little Penguin 58
Little Quail 34
Little Spotless Egret 144-145
Little Thrush 91
Little Tit 3
Little Wattle Bird 85
Little Wood Swallow 8
Log Runner, Spine-tailed .. 30
Long-billed Cockatoo 24
Long-billed Honey Eater .. 82
Long-billed Magpie 139
Long-billed Reed Warbler .. 11
Long-tailed Blue Wren .. 5
Long-tailed Grass Finch .. 3
Lorikeet, Blue-bellied 25
,, Little 28
,, Musk 27

L.—*Continued.* PAGE.

Lorikeet, Purple-crowned .. 29
,, Red-collared 26
,, Scaly-breasted .. 26
,, Swift 27
Lorilet, Blue-faced 28
Lory, Crimson-winged 25
,, King 25
Lyre Bird, Prince Albert's .. 134-135
,, ,, of New South Wales .. 128-133
,, ,, Queen Victoria's .. 131

M.

Magpie, Black-backed 138-139
,, Long-billed 139
,, Tasmanian 139
,, White-backed 138
Magpie Lark 22-23
Mallee Fowl 152
Mallee Parrakeet 27
Mangrove Bittern, Little .. 143
,, ,, Yellow-necked 144
Many-coloured Parrakeet .. 28
Marbled Frogmouth 126
Marsh Tern 51
Martin, Fairy 71
Martin, Tree 71
Masked Plover 148
Masked Wood Swallow 8
Miner, Bell 87
,, Dusky 88
,, Soldier Bird 88
,, Yellow-throated.. .. 88
Mistletoe Bird.. 69
Moor Hen, Black 142
,, ,, Rufous-tailed .. 143
Mooruk 160-162
Mountain Duck 55
Moustached Honey Eater .. 82
Musk Duck 55
Musk Lorikeet 27

N.

Nankeen Heron 146
Nankeen Kestrel 43
Narrow-billed Bronze Cuckoo, 3-11-69-70-78
Native Canary.. 72
Native Companion 158
Native Hen 142
,, ,, Black-tailed.. .. 142
Night Heron 146
Nightjar, Large-tailed 127
,, Little 126-127
,, Spotted 127
,, White-throated .. 127
Noddy 51
,, Grey 51
,, Lesser 51

INDEX—*Continued.*

N. *Continued.*	PAGE.
Noisy Scrub Bird, Rufous ..	16 to 19
Northern Coach Whip Bird ..	23
Northern Fantail	79
Northern Oriole	101
Northern Swamp Quail	33
Northern Thickhead	10
Nutmeg Pigeon	13

O.	
Olive Thickhead	9
Orange-backed Wren	5
Orange-bellied Grass Parrakeet ..	28
Orange-fronted Bush Chat ..	70
Orange-winged Tree Runner ..	66
Oriole	99-100
,, Northern	101
,, Yellow	101
Oriental Pratincole	35
Osprey, White-headed	46
Owl, Boobook	124
,, Lesser Masked	125
Oyster Catcher, Black	62
,, ,, Pied	62

P.	
Pacific Gull	61
Painted Quail	33
Painted Snipe	34
Pale-bellied White Eye	67
Pale-headed Parrakeet	25
Pallid Cuckoo	8-74-80-83-86-88
Parra, Comb-crested	36 to 39
Parrakeet, Beautiful	28
,, Black-tailed	27
,, Blue-winged Grass ..	27
,, Cockatoo	27
,, Crimson	27
,, Grass	27
,, Mallee	27
,, Many-coloured ..	28
,, Orange-bellied Grass ..	28
,, Pale-headed	25
,, Red-backed	28
,, Red-shouldered Grass ..	29
,, Red-vented	28
,, Warbling Grass ..	29
,, Yellow	27
,, Yellow-vented ..	28
Parrot, Rosella	25
Pardalote, Black-headed ..	1
,, Chestnut-rumped ..	2
,, Forty-spotted ..	1
,, Red-browed	2
,, Red-tipped	1
,, Spotted	1
,, Yellow-rumped ..	2
,, Yellow-tipped ..	1

P.—*Continued.*	
Partridge Pigeon	12
Pectoral Rail	31
Pelican	50
Penguin, Crested	58
,, Fairy	59
,, King	58
,, Little	58
,, Royal	58
Petrel, Banks' Dove	60
,, Broad-billed Dove ..	61
,, Diving	60
,, Dove	60
,, Fairy Dove	60
,, Giant	59
,, Grey-backed Storm ..	60
,, Short-tailed	59
,, Wedge-tailed	60
,, White-faced Storm ..	60
Pheasant Pigeon	14
Pied Butcher Bird	140
Pied Caterpillar Catcher ..	95
Pied Cormorant	52
Pied Crow Shrike	140
Pied Goose	55
Pied Honey Eater	81
Pied Oyster Catcher	62
Pigeon, Allied Fruit	12
,, Bronze-winged	12
,, Brush Bronze-winged ..	12
,, Crested	14
,, Flock	14
,, Little Green	14
,, Nutmeg	13
,, Partridge	12
,, Pheasant	14
,, Purple-breasted Fruit ..	13
,, Purple-crowned Fruit ..	13
,, Red-crowned Fruit ..	14
,, Rock	16
,, Rose-crowned Fruit ..	14
,, Top-knot	15 16
,, White-bellied Plumed ..	13
,, White-headed Fruit ..	15 16
,, Wonga Wonga	12
Pink-eared Duck	57
Pink-breasted Robin	7
Pitta, or Dragoon Bird	97
,, Lesser	97
,, Rainbow	97
Plain Wanderer	5
Plover, Black-breasted ..	147
,, Masked ..	148
,, Spur-winged ..	147
,, Stone	147
Plum-head Finch	4
Plumed Frogmouth	126

P.—*Continued.*	
Plumed Whistler Duck	56
Pratincole	35
,, Oriental	35
Purple-breasted Fruit Pigeon ..	13
Purple-crowned Fruit Pigeon ..	13
Purple-crowned Lorikeet ..	24
Purple Kingfisher	137

Q.	
Quail, Black-backed	33
,, Black-breasted	33
,, Brown	32
,, Chestnut-bellied	33
,, King	33
,, Little	34
,, Northern Swamp ..	33
,, Painted	33
,, Red-chested	33
,, Stubble	33
,, Tasmanian Swamp ..	32
,, White-bellied	33
Queensland Bower Bird	111
Queensland Scrub Fowl	152

R.	
Rail, Pectoral	31
,, Slate-breasted	31
,, Red-necked	31
Rainbow Pitta	97
Raven	137
Red Bill	141
Red Goshawk	48
Red Throat	11
Red Wattle Bird	85
Red-backed Kingfisher	136
Red-backed Parrakeet	28
Red-backed Wren	5
Red-breasted Babbler	89
Red-browed Finch	4
Red-browed Pardalote ..	2
Red-capped Dotterell	34
Red-capped Robin	7
Red-chested Quail	33
Red-collared Lorikeet ..	24
Red-crowned Fruit Pigeon ..	13
Red-kneed Dotterell ..	34
Red-necked Avocet ..	148
Red-necked Rail ..	31
Red-rumped Tit	76
Red-shouldered Grass Parrakeet ..	29
Red-tailed Black Cockatoo ..	21
Red-tailed Tropic Bird ..	52
Red-throated Honey Eater ..	82
Red-throated Thickhead ..	9
Red-tipped Pardalote ..	1
Red-vented Parrakeet	28
Red-winged Wren	5

INDEX—*Continued.*

R.—*Continued.* PAGE.

Reed Warbler 11
„ „ Long-billed .. 11
Reef Heron 146
Regent Bird .. .. ..111 to 114
Restless Flycatcher 74
Rifle Bird of Paradise of N.S.W...115 to 123
„ „ „ „ Albert .. 124
„ „ „ „ Victoria .. 123
Ringed Dotterell 35
Ringed Finch.. 4
Robin, Dusky 6
„ Flame-breasted.. .. 7
„ Grey-breasted Shrike .. 7
„ Hooded 6
„ Large-headed 7
„ Lesser Large-headed .. 7
„ Pink-breasted 7
„ Red-capped 7
„ Rose-breasted 7
„ Scarlet-breasted .. 7
„ White-breasted 6
„ White-browed 6
„ Yellow-breasted Shrike .. 7
„ Yellow-rumped Shrike .. 6
Rock Pigeon 16
Rock Warbler .. ..101 to 106
Roller or Dollar Bird 30
Roseate Tern 51
Rose-breasted Cockatoo .. 24
Rose-breasted Robin 7
Rose-crowned Fruit Pigeon .. 14
Rosella 25
„ Adelaide 27
Royal Penguin 58
Rufous Fantail 79-80
Rufous Scrub Bird .. .. 16 to 19
Rufous Song Lark 63
Rufous-breasted Honey Eater .. 83
Rufous-breasted Thrush .. 90
„ „ „ Lesser .. 91
Rufous-breasted Thickhead .. 10
Rufous-tailed Moor Hen .. 143
Russet Ground Thrush.. .. 98

S.

Sacred Kingfisher 136
Sandpiper, Common 36
Satin Bower Bird .. ..106 to 111
Satin Flycatcher 74
Scaly-breasted Lorikeet .. 26
Scarlet-breasted Robin 7
Scrub Bird, Noisy .. .. 16 to 19
„ „ Rufous .. .. 16 to 19
Scrub Fowl, Queensland .. 152
Scrub Tit 2
Scrub Wren, Brown 63-64
„ „ Large-billed .. 65

S. *Continued.* PAGE.

Scrub Wren, Spotted-throated .. 65
„ „ White-browed .. 64
„ „ Yellow-throated .. 21-22
Sea Curlew 150-151
Sea Eagle, White-bellied .. 44-45
„ „ White-headed .. 46
Shining Flycatcher 74
Shining Starling 24
Short-billed Crow 138
Short-billed Tree Tit 71
Short-tailed Albatross 58
Short-tailed Petrel 59
Shoveller Duck 55
Shrike Tit 12
Shrike Robin, Grey-breasted .. 7
„ „ Yellow-breasted .. 7
„ „ Yellow-rumped .. 6
„ Barred Cuckoo 92
„ Black-faced Cuckoo .. 91
„ Black-winged Crow .. 140
„ Grey Crow 140
„ Ground Cuckoo .. 91
„ Hill Crow 140
„ Leaden Crow 140
„ Little Cuckoo 92
„ Pied Crow 140
„ Small-billed Cuckoo .. 91
„ Sooty Crow .. 140
„ White-bellied Cuckoo .. 92
Silver Eye 67
Silver Gull 61
Silvery-blue Wren 1
Silvery-crowned Friar Bird .. 89
Singing Honey Eater 80
Skua Gull 61
Slate-breasted Rail 31
Small-billed Cuckoo Shrike .. 91
Snake-necked Darter 54
Snipe, Painted.. 34
Soldier Bird 88
Song Lark 62
„ „ Black-breasted .. 62
„ „ Rufous 63
Sooty Crow Shrike 140
Sooty Tern 50
Southern Fly Eater 73
Sparrow Hawk 40
Spectacled Flycatcher 77-78
Spine Bill 84
Spine Bill, White-browed .. 84
Spine-tailed Log Runner .. 30
Spiny-cheeked Honey Eater .. 86
Spoonbill, Black-billed 156
„ Yellow-legged .. 155
Spotted Bower Bird 114
Spotted Cat Bird 115

S.—*Continued.* PAGE.

Spotted Crake.. 31
Spotted Emu 160
Spotted Ground Bird 97
Spotted Harrier 49
Spotted Nightjar 127
Spotted Pardalote 1
Spotted-sided Finch 4
Spotted-throated Scrub Wren .. 65
Spur-winged Plover 147
Square-tailed Cuckoo 5-77-78-79
Square-tailed Kite 40
Starling, Shining 24
Stilt, Banded 150
„ White-headed .. ..148 to 150
Stone Plover 147
Stock, Black-necked 159
Storm Petrel, Grey-backed .. 60
„ „ White-faced .. 60
Straw-necked Ibis 158
Striated Field Wren 62
Striated Grass Wren 63
Striated Tit 2
Striped Brown Hawk 49
Striped Honey Eater 80
Strong-billed Honey Eater .. 83
Stubble Quail 33
Sun Bird 70
Swallow, Black-faced Wood .. 8
„ Black and White .. 71
„ Eastern 72
„ Grey-breasted Wood .. 8
„ Little Wood 8
„ Masked Wood .. 8
„ Welcome 71
„ White-bellied Wood .. 8
„ White-browed Wood .. 8
„ White-rumped Wood .. 8
„ Wood 8
Swamp Coucal 29
Swamp Hawk 49
Swan, Black 159
Swift Lorikeet 27

T.

Tasmanian Butcher Bird .. 141
„ Frogmouth 126
„ Kingfisher 137
„ Magpie 139
„ Swamp Quail .. 32
„ Tit 2
Tawny Frogmouth 125
„ Grass Bird 68
Teal 56
„ Grey 56
„ White-quilled Goose .. 56
Tern, Black-naped 50
„ Brown-winged 51

INDEX -*Continued.*

T.—*Continued.* PAGE.

Tern, Caspian 49
„ Crested 49-50
„ Grey Noddy 51
„ Gull-billed 51
„ Lesser Crested 51
„ Lesser Noddy 51
„ Marsh 51
„ Noddy 51
„ Panayan or Brown-winged .. 51
„ Roseate 51
„ Sooty 50
„ White 50
„ White-fronted 51
„ White-winged 52
Ternlet, White-faced 50
„ White-shafted 50
Thickhead, Black-tailed .. 9
„ Grey-tailed 9
„ Northern . .. 10
„ Olive 9
„ Red-throated .. 9
„ Rufous-breasted .. 10
„ Western 9
„ White-throated . 9
Thrush, Brown 90
„ Buff-bellied 90
„ Grey Harmonious . 90
„ Ground 97
„ Ground, Large-billed .. 98
„ Lesser Rufous-breasted . 91
„ Little 91
„ Rufous-breasted .. 90
„ Russet Ground .. 98
„ Whistling 89
Tippet, Grebe 151
Tit, Broad-tailed 2
„ Brown 2
„ Buff-rumped 2
„ Chestnut-rumped 2
„ Little 3
„ Red-rumped .. 3
„ Scrub 2
„ Short-billed Tree 71
„ Shrike 12
„ Striated 2
„ Tasmanian 2
„ Yellow-rumped 3
„ Yellow-tinted Tree .. . 71
Top-knot Pigeon 15-16
Tree Creeper, Black 10
„ „ Brown 10
„ „ White-throated .. 10
Tree Martin 71
Tree Runner, Black-capped .. 66
„ „ Orange-winged . 66
„ „ White-headed .. 67

T.—*Continued.* PAGE.

Tree Tit, Short-billed .. 71
„ „ Yellow-tinted .. 71
Tricoloured Bush Chat 70
Tropic Bird, Red-tailed . .. 62
Turkey, Barnard Brush .. 153
„ Brush or Scrub .. 153-154
„ Wild or Bustard .. 154
Turquoise Wren 4

V.

Victoria's Lyre Bird 134
Victoria's Rifle Bird of Paradise .. 123

W.

Wanderer, Plain 35
Wandering Albatross 57
Warbler, Grass 68-69
„ Long-billed Reed .. 11
„ Reed 11
„ Rock .. .. ..101 to 106
Warbling Grass Parrakeet .. 29
Wattle Bird, Brush 86
„ „ Red 86
„ „ Little 85
„ „ Yellow 85
Wedge Bill 12
Wedge-tailed Petrel 60
Wedge-tailed Eagle 44
Welcome Swallow 71
Western Fantail 79
Western Thickhead 9
Western White-naped Honey Eater 84
Whip Bird 23
Whistling Duck 57
„ „ Plumed .. 57
Whistling Eagle 46-47
Whistling Thrush 89
White Cockatoo 24
White Crane 144
White Eye 67
„ „ Green-backed .. 67
„ „ Pale-bellied 67
White Face 68
„ „ Black-banded .. 67
White Goshawk 39
„ „ Lesser 39
White Ibis 157
White Tern 50
White-backed Magpie 138
White-backed Wren 6
White-bearded Honey Eater .. 82
White-bellied Cuckoo Shrike .. 92
White-bellied Flycatcher .. 78
White-bellied Plumed Pigeon .. 13
White-bellied Quail 33
White-bellied Sea Eagle .. 44-45
White-bellied Wood Swallow .. 8

W.—*Continued.* PAGE.

White-breasted Cormorant .. 52
White-breasted Honey Eater .. 82
White-breasted Robin 6
White-browed Babbler 20
White-browed Crake 32
White-browed Robin 6
White-browed Scrub Wren .. 64
White-browed Spine Bill .. 84
White-browed Wood Swallow .. 8
White-capped Albatross .. 58
White-cheeked Honey Eater .. 82
White-eared Honey Eater 81
White-eyed Duck 56
White-faced Storm Petrel .. 60
White-faced Ternlet 50
White-fronted Bush Chat .. 70
White-fronted Fantail 79
White-fronted Heron 146
White-fronted Honey Eater .. 82
White-fronted Tern 51
White-headed Fruit Pigeon .. 15-16
White-headed Osprey 46
White-headed Sea Eagle .. 46
White-headed Sittella 67
White-headed Stilt .. ..148 to 150
White-headed Tree Runner .. 67
White-naped Honey Eater .. 83
White-necked Heron 145
White-plumed Honey Eater .. 81
White-quilled Goose Teal .. 56
White-quilled Honey Eater .. 85
White-rumped Wood Swallow .. 8
White-shafted Fantail 78-79
White-shafted Ternlet 50
White-shouldered Caterpillar Catcher 96
White-tailed Kingfisher .. 136
White-throated Fly Eater .. 72
White-throated Nightjar .. 127
White-throated Thickhead .. 9
White-throated Tree Creeper .. 10
White-winged Butcher Bird .. 140
White-winged Chough 106
White-winged Tern 52
White-winged Wren 5
Wild Turkey 154
Wonga-Wonga Pigeon 12
Wood Duck 55
Wood Swallows 8
Wren, Banded 5
„ Black-backed 5
„ Blue 5-6
„ Brown Scrub 63-64
Chestnut-rumped Ground .. 9
Emu 6
„ Field 62
„ Grass 63

INDEX—*Continued.*

W.—*Continued*	PAGE
Wren, Lambert's	5
,, Large-billed Scrub	64
,, Little Field	63
,, Long-tailed Blue	5
,, Orange-backed	5
,, Red-backed	5
,, Red-winged	5
,, Silvery-blue	4
,, Spotted-throated Scrub	65
,, Striated Grass	63
,, Striated Field	62
,, Turquoise	4
,, White-backed	6
,, White-browed Scrub	64
Wren, White-winged	5
,, Yellow-throated Scrub	21-22

Y	
Yellow Oriole	101
Yellow Parrakeet	27
Yellow-bellied Fig Bird	90
Yellow-breasted Bush Chat	71
Yellow-breasted Shrike Robin	7
Yellow-eared Honey Eater	85
Yellow-faced Honey Eater	80
Yellow-legged Spoonbill	155
Yellow-necked Mangrove Bittern	144
Yellow-rumped Pardalote	2
Yellow-rumped Shrike Robin	6
Yellow-rumped Tit	3
Yellow-spotted Honey Eater	80
Yellow-throated Friar Bird	84
Yellow-throated Honey Eater	81
Yellow-throated Miner	88
Yellow-throated Scrub Wren	21-22
Yellow-tinted Tree Tit	71
Yellow-tipped Pardalote	1
Yellow-tufted Honey Eater	80
Yellow-vented Parrakeet	28
Yellow Wattle Bird	87

CONTENTS OF CABINET.

Drawer.	Number of Species.	Number of Eggs.
A.	44	214
B.	39	140
C.	36	118
D.	38	115
E.	29	149
F.	15	42
G.	12	36
H.	24	71
I.	15	64
J.	29	47
K.	43	170
L.	49	168
M.	33	121
N.	24	75
O.	24	76
P.	18	92
Q.	17	89
R.	11	72
S.	11	42
T.	6	13
Cuckoos.	9	—
	Total 526	Total 1914

The eggs belonging to nine species of Cuckoos, and not including the Swamp Coucal, are represented in various sets of eggs in the collection, and bring the total up to **526** different species.

F. W. WHITE,
Printer,
344 KENT STREET,
SYDNEY.

ADDITIONS.

While this volume was in the press, I made several interesting additions to the collection with the eggs of Cuckoos, which had been deposited in the nests of foster parents, not previously included in the collection. They were collected by myself in the bush at Chatswood, near Sydney, and are as follows :—

Data No. 61A.—YELLOW-BREASTED SHRIKE ROBIN, set of 2 eggs, with one egg of the PALLID CUCKOO. Taken on 6th October, 1907.

Data No. 410A.—WHITE-THROATED FLY EATER, pair of eggs, with one egg of the BRONZE CUCKOO. Taken on 27th October, 1907.

Data No. 448A.—YELLOW-FACED HONEY EATER, set of 3 eggs, with one egg of the NARROW-BILLED BRONZE CUCKOO. Taken on 27th October, 1907.

Data No. 384A.—WHITE EYE (*Zosterops*), one pair of eggs, with two eggs of the NARROW-BILLED BRONZE CUCKOO. Taken on 13th October, 1907.

Data No. 51A.—BLUE WREN, set of 4 eggs, with one egg of the BRONZE CUCKOO. Taken on 17th November, 1907.

Data No. 436A.—WHITE-SHAFTED FANTAIL, set of 2 eggs, with one egg of the FAN-TAILED CUCKOO. Taken on 29th October, 1907.

Many native names of birds, as known to the aborigines of the Clarence River district of New South Wales, already appear in the book under the various headings ; and the three following are additional, viz. :—

RUFOUS-BREASTED THRUSH (page 90)—Dun-dar-bin.

LARGE-HEADED ROBIN (page 7)—Dun-dar-in-gen.

COUCAL OR SWAMP PHEASANT (Page 29)—Be-bin-gera.

SUPPLEMENTARY.

The subject on page 1 is shown at less than one-twentieth of the natural size.

" " " 16 " nearly half of the natural size.
" " " 17 " one-fifteenth of the natural size.
" " " 21 " one-seventh of the natural size.
" " " 30 " one-fourteenth of the natural size.
" " " 32 " one-fifteenth of the natural size.
" " " 36 " one-thirteenth of the natural size.
" " " 37 " one-thirteenth of the natural size.
" " " 41 " one-sixth of the natural size.
" " " 42 " one-sixth of the natural size.

The set of 3 eggs of the Black-shouldered Kite, in data No. 248, page 41, was taken on the 31st July, 1898. The photograph depicting the clutch of 4 eggs of the Black-shouldered Kite, of data No. 247, will be found on page 145, the block having arrived too late for its insertion on the correct page.

ERRATA.

The " Bellinger " and " *Bellenger* " frequently mentioned is one and the same river.
The word " Dotterell " should read " *Dottrel* " throughout the book.
In data No. 285 (2nd line) " containg " should read " *containing.*"
The word " pupa " on pages 18 and 132 should read " *pupæ.*"
In data No. 33 " Rockhhmpton " should read " *Rockhampton.*"
In data No. 332 " Macquarrie " should read " *Macquarie.*"
In data No. 547A (page 106) the word measnres should read " *measures.*"
In data No. 183 " monntains " should read " *mountains.*"
On page 96 " White-shouldered Caterpillar Eater " should read " *White-shouldered Caterpillar Catcher.*"
In data No. 38 " Torquoise Wren " should read " *Turquoise*

SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 00703 0703